

engineering and constructing a better tomorrow

MA6910138

October 24, 2005

Douglas Corb
NPDES Permit Unit
Mail Code (CPE)
Office of Ecosystem Protection
Environmental Protection Agency
One Congress Street, Suite 110
Boston, Massachusetts 02114-2023

RE:

Notice of Intent for Remediation General Permit

NPDES Exclusion # MA 0031496

**Bendix Treatment Facility** 

180 Laurel Street

Greenfield, MA 01301-3109

Dear Mr. Corb:

On behalf of Honeywell International, Inc., MACTEC Engineering and Consulting, Inc. (MACTEC) is forwarding the enclosed completed forms. This form entitled "Section B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit" is for the above—referenced site. The table of contents provides a listing of the appendices provided a backup and support of the information in the forms including the latest laboratory analyses.

Honeywell and MACTEC remain committed to the safe and effective operation of the groundwater treatment plant. Please contact us at 781-245-6606 with any questions.

Sincerely,

MACTEC Engineering and Consulting, Inc.

Kerry Tull, P.G., LSP

Senior Principal

Eric Axelrod, LSP Project Manager

Enclosure

cc:

Rich Galloway / Honeywell

James O'Loughlin, P.E., LSP / Parsons Mike Scott / Nutter, McClennen, Fish

 $MACTEC\ Project\ Files\ {\tt [P:W2-mfg\lambda]} Products \ {\tt Transition\ Items\lambda]} Products \ {\tt Transition\ Item$ 

### TABLE OF CONTENTS

Section 1.0

Notice of Intent for the Remediation General Permit

Appendix A

Site Figure

Appendix B

**System Diagram** 

Appendix C

Correspondence with EPA and MADEP

**Regarding NPDES Permit** 

Appendix D

**MSDS** 

Appendix E

Influent/Effluent Analytical Results October 2005

### B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General site information. Please provide the following inform	ation about the si	te:					
a) Name of facility/site: Bendix Treatment Facility		Facility/site address: 180 Laurel Street					
Location of facility/site: Facility SIC co	cation of facility/site: Facility SIC code(s): 32192			Street: Laurel Street			
b) Name of facility/site owner: Repal, Inc. (Foreclosu	re)	Town: Greenfield		1			
Email address of owner: N/A		State:	Zip:	County:			
Telephone no.of facility/site owner: N/A	•	MA	01301-3109	Franklin			
Fax no. of facility/site owner: N/A		Owner is (check one): 1. Fe 3. Private X 4. other, is	deral 2. State/Trib. f so, describe:	al			
Address of owner (if different from site): N/A							
Street:	- <sub> </sub>		<del></del>				
Town:	State:	Zip:	County:				
c) Legal name of operator:	Operator telep	perator telephone no: (973)455-4640					
Honeywell	Operator fax	no.: (973)455 <b>-</b> 3082	Operator email: R10	ch.Galloway@Honeywell			
Operator contact name and title: Rich Galloway, Remedi	ation Manag	ger					
Address of operator (if different from owner):		Columbia Road					
Town: Morristown	State: NJ	Zip: 07960-4640	County: Morris				
d) Check "yes" or "no" for the following:  1. Has a prior NPDES permit exclusion been granted for the discharg  2. Has a prior NPDES application (Form 1 & 2C) ever been filed for  3. Is the discharge a "new discharge" as defined by 40 CFR 122.2?   4. For sites in Massachusetts, is the discharge covered under the MA	the discharge? Y	es NO_A, 11 yes, date	and tracking ".	0			

e) Is site/facility subject to any State permitting generation of discharge? Yes_X No If "yes," please list:  1. site identification # assigned by the state of 2. permit or license # assigned: 78715  3. state agency contact information: name, local Mr. Fish, MADEP, 436 Dwight St	NH or MA: Tier 1B Permit NH or MA: RTN 1-000079	f) Is the site/facility covered by any other EPA permit, including:  1. multi-sector storm water general permit? Y N_X, if Y, number:  2. phase I or II construction storm water general permit? Y N_X, if Y, number:  3. individual NPDES permit? Y N_X, if Y, number:  4. any other water quality related permit? Y N_X, if Y, number:					
		ng additional sheets as needed) including:					
2. Discharge information. Please provide information about the discharge, (attaching additional sheets as needed) including:  a) Describe the discharge activities for which the owner/applicant is seeking coverage: Groundwater is pumped through UV-Lamp and Hydrogen Peroxide Treatment System and discharged to storm sewer. See attached Flow and Treatment Schematic.							
Cil Average f	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft3/s)? Max. flow 0.13 cubic ft/sec Average flow 0.008 Is maximum flow a design value? YXN For average flow, include the units and appropriate notation if this value is a design value or estimate if not available.						
3) Latitude and longitude of each discharge with pt.4:long lat; pt.5: long	thin 100 feet: pt.1:long. <u>42.57</u> 9at. <u>72.6</u> lat; pt.6:longlat	519 pt.2: longlat; pt.3: longlat; pt.7: longlat; etc.					
4) If hydrostatic testing, total volume of the discharge (gals):  N/A  5) Is the discharge intermittent N or seasonal N ? Constant Is discharge ongoing Yes X No ?							
c) Expected dates of discharge (mm/dd/yy): start 1991 end On-Going							
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s). Attached							

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

Gasoline Only	VOC Only X	Primarily Metals	Urban Fill Sites	Contaminated Sumps	Mixed Contaminants	Aquifer Testing
Fuel Oils (and Other Oils) only	VOC with Other Contaminants	Petroleum with Other Contaminants	Listed Contaminated Sites	Contaminated Dredge Condensates	Hydrostatic Testing of Pipelines/Tanks	Well Development or Rehabilitation

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is believed present or believed absent in the potential

discharge. Attach additional sheets as needed.

Absent Present Samples Sample Me (1 min- (e.g., grab) Usi	1	1		Analytical Method	Minimum Level (ML) of	Maximum daily value		Avg. daily value	
	Used (method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)			
1. Total Suspended Solids	Х								
2. Total Residual Chlorine	X								
3. Total Petroleum Hydrocarbons	X								
4. Cyanide	X								<u> </u>
5. Benzene	Х								 
6. Toluene	Х						ļ		
7. Ethylbenzene	Х	-							
8. (m,p,o) Xylenes	Х							<u> </u>	
9. Total BTEX4	Х								

<sup>&</sup>lt;sup>4</sup>BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

PARAMETER	Believe	Believe	# of	Type of Sample (e.g.,	Analytical Method	Minimum Level (ML) of	Maximum daily	value	Avg. daily value	
	Absent	Present	Samples (1 min- imum)	grab)	Used (method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
10. Ethylene Dibromide 5 (1,2- Dibromo-methane)	X									
11. Methyl-tert-Butyl Ether (MtBE)	х									
12. tert-Butyl Alcohol (TBA)	X									
13. tert-Amyl Methyl Ether (TAME)	X									
14. Naphthalene	Х									ļ
15. Carbon Tetra- chloride	х									
16. 1,4 Dichlorobenzene	X									<u> </u>
17. 1,2 Dichlorobenzene	Х									
18. 1,3 Dichlorobenzene	X									
19. 1,1 Dichloroethane	X_									
20. 1,2 Dichloroethane	X									
21. 1,1 Dichloroethylene	Х									
22. cis-1,2 Dichloro- ethylene	,	X							-	
23. Dichloromethane (Methylene Chloride)	Х									
24. Tetrachloroethylene	Х						<u> </u>			L

<sup>&</sup>lt;sup>5</sup>EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

PARAMETER	METER Believe Believe		# of	Type of Sample (e.g.,	Analytical Method Used	Minimum Level (ML) of Test	Maximum daily	value	Avg. daily Value	
·	Absent	Present	Samples (1 min- imum)	grab)	(method #)	Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
25. 1,1,1 Trichloroethane	Х									ļ
26. 1,1,2 Trichloroethane	Х									
27. Trichloroethylene		х								ļ
28. Vinyl Chloride	Х									
29. Acetone	Х									
30. 1,4 Dioxane	Х									
31. Total Phenols	X									
32. Pentachlorophenol	X									
33. Total Phthalates <sup>6</sup> (Phthalate esthers)	х									
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	X	•								
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	X									
a. Benzo(a) Anthracene	Х							ļ		
b. Benzo(a) Pyrene	Х									
c. Benzo(b)Fluoranthene	Х								 	
d. Benzo(k) Fluoranthene	Х									
e. Chrysene	Х									

 $<sup>^6\</sup>mathrm{The}$  sum of individual phthalate compounds.

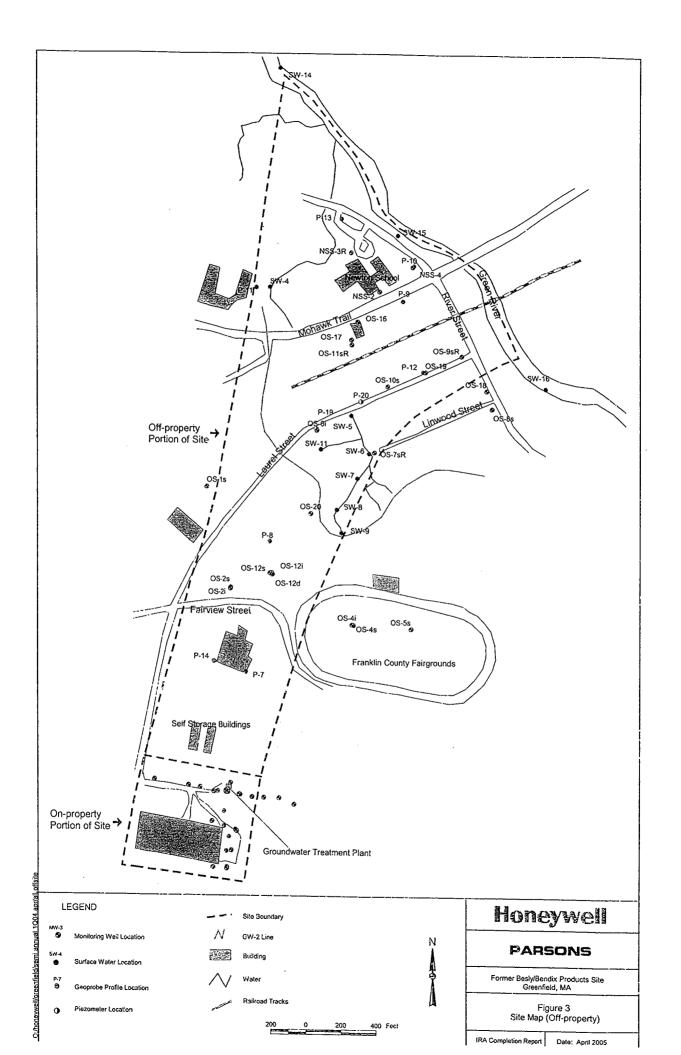
PARAMETER	Believe	Believe	# of Samples	Type of Sample (c.g.,	Analytical Method Used	Minimum Level (ML) of	Maximum daily	value	Average daily value	
	Absent	Present	(1 min- imum)	grab)	(method #)	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)
f. Dibenzo(a,h) anthracene	Х									
g. Indeno(1,2,3-cd) Pyrene	Х									
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	X									
h. Acenaphthene	Х								ļ	ļ
i. Acenaphthylene	Х						ļ			
j. Anthracene	Х				<u> </u>			ļ		
k. Benzo(ghi) Perylene	Х									ļ
l. Fluoranthene	Х									
m. Fluorene	х									
n. Naphthalene-	Х									
o. Phenanthrene	Х									
p. Pyrene	х									
37. Total Polychlorinated Biphenyls (PCBs)	Х									
38. Antimony	Х									
39. Arsenic	Х									
40. Cadmium	Х									
41. Chromium III	Х									
42. Chromium VI	Х									<u> </u>

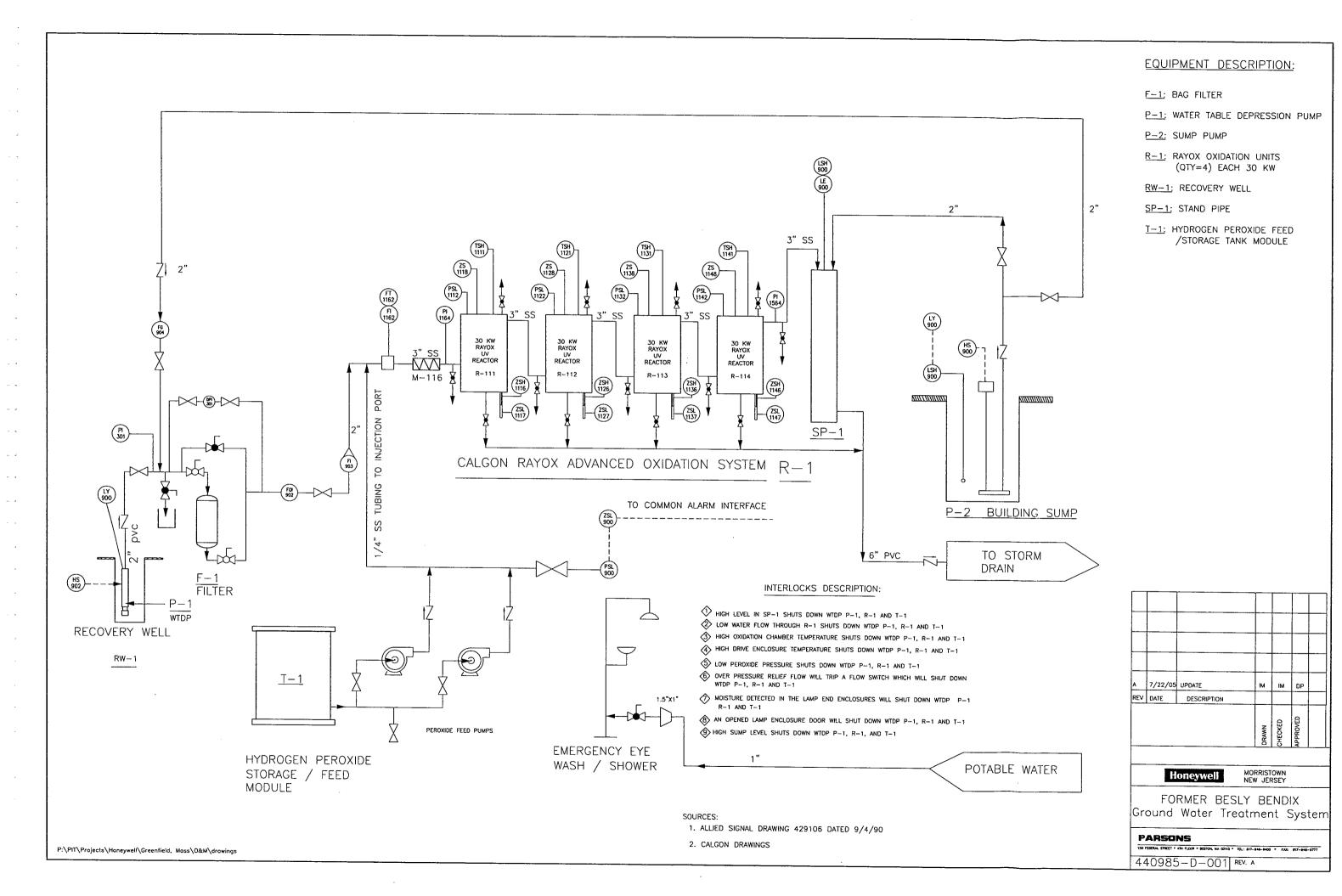
Absent Present Samples Sample (e.g., Metho	1		l .		Analytical	Minimum Level (ML) of	Maximum daily	value	Avg. daily value	
	1	Test Method	concentration (ug/l)	mass (kg)	concentration (ug/l)	mass (kg)				
43. Copper	X							<u> </u>		1
44. Lead	х	<u> </u>						<del> </del>		<u> </u>
45. Mercury	X									
46. Nickel	X									<u> </u>
47. Selenium	X									
48. Silver	X									<u> </u>
49. Zinc	X									
50. Iron	Х									
Other (describe):										
	Х					<u> </u>	<u> </u>			<u> </u>

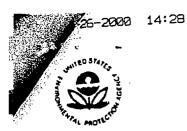
c) For discharges where metals are believed present, please fill out the following: N/A	
Step 1: Do any of the metals in the influent have a reasonable potential to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? YN	If yes, which metals?  N/A
has a startial to exceed the Annendix III limits	Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?  YN If "Yes," list which metals:

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:									
a) A description of the treatment system, including a schematic of the proposed or existing treatment system: UV/Hydrogen Peroxide									
				Oil/water sep		Equalization tanks	11 1 0	Bag filter X	GAC filter
b) Identify each applicable treatment unit (check all	Frac. tank	Air stripper				-		<u> </u>	
that apply):	Chlorination		Dechlorination			Rayox UV Reac			
c) Proposed average and max Average flow rate of discharge	ximum flow rage 35 GPM	ites (gallons per m Maximum flow r	inute)	for the discharg treatment syste	ge and the design flow m 60 GPM Des	rate(s) (gallons per i sign flow rate of treati	minute nent s	e) of the treatine ystein 60 GF	nt system:
d) A description of chemical									·
5. Receiving surface water(s).	Please provid	le information abou	1					lands	Other (describe):
a) Identify the discharge path		Direct	L	in facility	Storm drain X	River/brook	L		<u> </u>
b) Provide a narrative descrip						The storm dr	ain	leads to t	he Laurel
Street drain line e									
c) Attach a detailed map(s) in	dicating the sit	e location and loca	tion of	the outfall to t	he receiving water: A	Attached			
<ol> <li>For multiple discharges, nu</li> <li>For indirect dischargers, in</li> </ol>	42 1 1	:	o to th	e indirect conv	eyance and the discha	rge to surface water		hard on HICCO	tonographical
The map should also include t	the location and	d distance to the ne	earest s	anitary sewer a	s well as the locus of	nearby sensitive rece	ptors (	based on USUS	topograpinear
mapping), such as surface waters, drinking water supplies, and wetland areas.									
d) Provide the state water quality classification of the receiving water Green River is classified, as grade B.									
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving watercfs  Please attach any calculation sheets used to support stream flow and dilution calculations.									
f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes No_X_ If yes, for which pollutant(s)?									

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.
a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? YesNo  Has any consultation with the federal services been completed? No_X or is consultation underway? No_X  What were the results of the consultation with the U.S. Fish and Widlife Service and/or National Marine Fisheries Services (check one):  a "no jeopardy" opinion?or written concurrence on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?
b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge?  Yes No X Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes No X
7. Supplemental information. :
Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.
8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:  I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
Facility/Site Name: Bendix Treatment Facility
Operator signature: Richard Galloway  Auchul W. Walleren
Title: Remediation Manager
Date: 10/12/05







### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

### REGION !

ENVIRONMENTAL SERVICES DIVISION 60 WESTVIEW STREET, LEXINGTON, MASSACHUSETTS 02173-3185

23 July 1991

Mr. Robert Ford Allied Signal, Inc. P.O. Box 1139R Morristown, New Jersey 07962-1139

Re: Exclusion from NPDES Requirements
Bendix/Besly Site
180 Laurel Street
Greenfield, Massachusetts 01301



### Dear Mr. Ford:

Based upon information provided by you, I grant, pursuant to 40 CFR 122.3(d), an emergency exclusion from the requirement for a permit under the National Pollution Discharge Elimination System (NPDES), in order that a recovery and treatment system may begin operation in a timely fashion, pending the issuance of permit (# MA0031496).

Subject to other controls that may be established by the State of New Hampshire, and the Town of Greenfield, you are authorized to discharge up to 75 gallons of treated water per minute from a treatment system consisting of groundwater depression leading to an ultraviolet light/peroxide chemical oxidation treatment system, ultraviolet light/peroxide chemical oxidation treatment system, prior to discharge into a storm drainage system which leads to the Green River. Operation of the treatment system must be in accordance with the following conditions:

- No discharge of oil, sufficient to cause a sheen (as defined in 40 CFR 110), occurs to the storm drain. The discharge of a sheen of oil, constitutes an oil spill and must be reported, immediately, to the National Response Center [(800) 424-8802].
- Security provisions are maintained to assure that system failure, vandalism, or other incident will be addressed in a timely fashion, preventing the loss of oil or contaminated water to the storm drainage system.
- 3. Sampling and analysis, in accordance with EPA methods, is performed for Benzene, Toluene, Ethyl Benzene, Xylenes (BTEX), Trichloroethylene, Tetrachloroethylene, 1,2-Trans-Dichloroethylene, 1,1,1-Trichloroethane, Total Petroleum Hydrocarbons. Total BTEX is not to exceed 100 ppb, while while Benzene, Trichloroethylene, and Tetrachloroethylene may not exceed 5 ppb. 1,2-Trans-Dichloroethylene may not exceed 100 ppb, and 1,1,1-Trichloroethane may not exceed 200 ppb Total Petroleum Hydrocarbons may not exceed 5 ppm. Sampling and analysis of the influent to treatment and the effluent to storm drainage system, during the first week of operations, is storm drainage system, during the first week of operations, is sampling and analysis must be performed, at least, once per

2

week. After the first month, sampling and analysis must be performed, at least, once every two weeks, until a total of 4 months of operations (twice monthly sampling, therefore, for months 2, 3, and 4) have been completed. After the fourth month, sampling and analysis must be performed, at least, once per month. In addition, if the first four months of sampling and analysis show that BTEX compounds are not present, no further analysis for them will be required. Other pollutant parameters cited in Part V of your application are to be monitored and within the limits provided in Sections 2 and 3 of Part V.

Analytical Reports, with quality control information, are to be reported to the DEP Regional Engineer and to this office by the 28th of the following month.

- You, or your representative, provide 24 hours notice of system start-up.
- Upon receipt of the final permit from the DEP and EPA, you are to provide a copy of the signature page to indicate that the 5. Upon receipt of that document this Permit is in hand. Upon receipt of that document this exclusion will cease, and operations in accordance with the Permit is in hand. Permit will be required.

This exclusion will be in effect until the final Permit #MA0031496 is issued.

If any questions should arise, please do not hesitate to contact me at (617) 860-4362.

sincerely. Double With

David W. Tordoff,

On-Scene Coordinator

Response & Prevention Section

USEPA T. Landry cc:

DEP/DWPC C. Hall DEP/DSHW R. Green

### Memorandum

Allied-Signal Inc. Morris Township, New Jersey



Date: August 27, 1991

To: R. J. Ford

Subject: BESLY PRODUCTS REMEDIATION PROJECT

Exclusion from NPDES Requirements

The following comments are in response to the items listed in the "Exclusion from NPDES Requirements" submittal from Region 1.

- The discharge of oil from the treatment system is highly unlikely since there is no oil in the process structure or in the process equipment, including pumps. In addition, any spills will be collected in the emergency sump provided and managed appropriately.
- There are presently a series of interlocks that have been designed to address system failure. The interlocks are monitored 24 hrs./day by an ADT system.
- Sampling, analysis and reporting protocol will be modified to satisfy the exclusion requirements.
- System start-up is on schedule for September 9, 1991. Verification and notification will be provided the week of September 2, 1991.

Please feel free to call me should you require any further information.

Sincerely

M. A. Vazquez

cc: W. J. Hague VPF 32062-16.1 Honeywell P.O. Box 1139 Morristown, NJ 07962-1139

December 13, 2000

Richard M. Green
Section Chief
Site Management/Permits
Bureau of Waste Site Cleanup
Massachusetts Department of Environmental Protection

Subject:

Former Besley/Bendix Site

180 Laurel Avenue Greenfield, MA 01301

Permit No. 78715, Disposal Site No. 1-0000079

Dear Mr. Green:

Per our telephone conversation this date, attached please find the signed originals for a Tier I Minor Permit Modification Transmittal Form for the subject site. The modification form signed by myself and a Massachusetts Licensed Site Professional updates the permittee name to Honeywell Inc. and the primary representative to reflect my name. If you have questions or comments please contact me directly at 973-455-4640 or E-mail at <a href="Rich.Galloway@Honeywell.com">Rich.Galloway@Honeywell.com</a>.

Sincerely,

Richard W. Galloway

Manager- Remediation and Evaluation Services.

C: R. Ford

J. Drobinski - ERM

S. Greenwald - Renaissance Bld.



### Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

	DA42C-103
Ralease	Tracking Number
ا نــا	

+++ WOODBURY NY

### TIER I MINOR PERMIT MODIFICATION TRANSMITTAL

'ermit	7	7	IŽ.
lumber	1 /3	ı	1.7
, , ,			

FORM Pursuant to 310 CMR 40.0725 (Subpart G)	78/15
Minor Permit Modification Requests are not subject to permit processing requirements under 310 CMR 40.0720 - 40,0724 or 3	170 CMR 4.00
DISCORAL RITE LOCATION:	
Ste Name: FORMER DESLEY / ISENDIX SITE	
Street:	
CREENFIEID ZIP Code: 01301	
Related Release Tracking Numbers That This Minor Permit Modification Request Addresses:	
B. THIS FORM IS BEING USED TO: (check all appropriate pategories below)	
Submit an Alternative or Corrected Minor Permit Modification Request (also must check use(s) below). Date of Prior Submittel:	
Modify a Permittee Name, Address or Contact Person (complete Sections A, B, C, 1, J, K and L).	
Change a Primary Representative (complete Sections A, B, D, L, J, K and L).	
Change an LSP-of-Record (complete Sections A, B, E, J, K and L).	·
Correct Typographical Errors (complete Sections A, B, F, I, J, K and L).	
Correct Omissions (complete Sections A. B. G. I. J. Kand U.	Ī
Submit Other Minor Permit Modifications, including linking an additional Release Tracking Number(s) to a Permit (complete Sections A, B, H, I, J, K and L).	
C. MODIFICATION TO PERMITTEE NAME, ADDRESS OR CONTACT PERSON: (Complete entire suction)  Permittee Organization: Honey Well Inc	_
O 1 and 17 (Allowand in MAIALER- PRIEDIAT	& 407
Permittee Contact: Production SERV	
Street 101 COTOM OTT PORTS	62
City/Town: MORRISTOWN State: NY ZIP Code: 0/9 Telephone: 973-455 - Ex.: 4640 FAX: (optional) 973-455-2	2928
For disposal sites with more than one Pormittee, each Permittee making a modification to name, address or contact person must separately submit any proposed changes.	
D. CHANGE IN PRIMARY REPRESENTATIVE: (complete entire suction)	
A Primary Representative is required only for Sites having more than one Permittee.	
Dhock here If the Primary Representative is also a Pormittee.  Primary Representative Name: RICHARD W. GALLOWA! Title: MANAGER - RI	<u> </u>
Primary Representative Organization: Honeywell INC	<del></del> · ·
street: 101 Columbia Road	536
CINTOWN: MORRISTOWN State: 101 ZIP Code: 1	762
Telephone: 973-455- Ex: 4640 FAX: (optional) 973-455-	<u> </u>
Certification of Primary Representative:    attest under the pains and penalties of perjury that I am fully authorized to act on behalf of all permittees holding this Tier I Permit	for the
purposes stated in 310 CMR 40,0703(7)(4):	
to receive oral and written correspondence from DEP with respect to the application; to receive oral and written correspondence from DEP with respect to performance of response actions upon issuence of a Tier to receive any statement of fee required by 310 CMR 4.03(3) upon issuence of a Tier I permit.	
I understand that any material received by the Primary Representative from DEP shall be deemed received by the Permittee(s), and that there are significant penalties, including, false, inact that there are significant penalties, including, and implications and imprisonment, for willfully submitting false, inact	colunte or
Signature: R.W. Julley December	6,2000
The person signing this portification MUST be the Primary Representative named above.	



11/10/00 . 13:15

### Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

ERM N.E.

	BWSC-109
Release	Tracking Number
<b>-</b>	

### TIER I MINOR PERMIT MODIFICATION TRANSMITTAL

DEP				art G)				
	= = C DECOR	Dr. Ohn new LS!	P-of-Record must sign	(nolloss eith queta bns	•			
Hange in LS	P-OF-RECOR							
Nems:			_ LSP#:	<del>-</del>				
hone:			_ Ext.:	<del></del>	•			
(antional)				<del></del>				
dure:				<del></del>			•	
				<del></del> ·				
,	OF TYPOGR	APHICAL ERRO	RS: (describe byp	egraphical errors below)				
ORRECHON	OF TIPOCH							-
			•				·	_
*.								_
								_
					•			
							<del></del>	
	N OF OMISSI	ONS:						
			- 14 h davidisamina 1900 (P	עות ברסובולרום פופולד	st not affect the r	pature of compl	leadry of the	
acribe erry omisa	sions to be correct	ued by this Minor Pen	We no spice of ab	et. These emissions mu plicable documentation.			•	
		FIRST STATE OF THE PROPERTY OF THE PERSON AND PR						
Whiten technica	HERON, LIBORS							
Whiten technism	a action.	•						_
Minus Isopus	SECTION.	•			·			
ministration is a second	<u> </u>							
OTUEP MIN	NOR PERMIT.	MODIFICATIONS	:					
OTHER MIN	NOR PERMIT. I	MODIFICATIONS	: r who is NOT a Perm					
OTHER MIN	NOR PERMIT. I	MODIFICATIONS	: r who is NOT a Perm	inee:				
OTHER MIT	NOR PERMIT. I	MODIFICATIONS	rwho is NOT a Perm	inee:				
OTHER Militaria, address a large of Organizations of Contact	NOR PERMIT. I	MODIFICATIONS on for a head Owner	: rwho (s NOT a Perm	Title:				
OTHER Militaria, address a large of Organizations of Contact	NOR PERMIT. I	MODIFICATIONS on for a head Owner	: rwho (s NOT a Perm	Title:				
OTHER MIP sma, address s lame of Organiza lame of Contact	NOR PERMIT. I	MODIFICATIONS	r who is NOT a Perm	Title:	ZIP Cod	E:		
OTHER MIP sma, address s lame of Organiza lame of Contact	NOR PERMIT. I	MODIFICATIONS	r who is NOT a Perm	Title:	ZIP Cod	E:		
OTHER Militaria, address a liente of Organizations of Contact Street:  City/Town:	NOR PERMIT. I	MODIFICATIONS	: r who is NOT a Parm	Title:	ZIP Cod	E:		
OTHER Militaria, address a larne of Organizations of Contact City/Town:	NOR PERMIT. I	MODIFICATIONS on for a hear Owner	Ext.:	State:  FAX: (optional)  ermittee:	ZIP Cod	E:		
OTHER MIN some, address lame of Organiza iamo of Contact Street: City/Town: Telephone:	NOR PERMIT I	MODIFICATIONS on for a hear Owner son for a new Open	Ext.:	Title:	ZIP Cod	E'		
OTHER MIN some, address lame of Organiza iamo of Contact Street: City/Town: Telephone:	NOR PERMIT I	MODIFICATIONS on for a hear Owner son for a new Open	Ext.:	Title:	ZIP Cod	E'		
OTHER MIN sma, address lame of Organiza lame of Contact City/Town: Telephone: Name of Organiz	NOR PERMIT. I	MODIFICATIONS on for a hear Owner son for a new Open	Ext.:	Title:	ZIP Cad			
OTHER MIN sma, address lame of Organiza lame of Contact City/Town: Telephone: Name of Organiz	NOR PERMIT. I	MODIFICATIONS on for a hear Owner son for a new Open	Ext.:	Title:	ZIP Cad			
OTHER MIN sma, address lame of Organiza lame of Contact City/Town: Telephone: Name of Organiz	NOR PERMIT. I	MODIFICATIONS on for a hear Owner son for a new Open	Ext.:	Title:	ZIP Cod	cie:		
OTHER MIN sina, address leme of Organiza lame of Contact City/Town: Telephone: Name of Organiz Name of Contact Street: City/Town:	NOR PERMIT. I	MODIFICATIONS on for a new Owner son for a new Open	Ext.:	Title:	ZIP Cod	cie:		



### Massachusetts Department of Environmental Protection Bureau of Waste Site Clasnup

		D113C.	. 103
Rele	999	Tracking N	nuper
	-[		

TIER I MINOR PERMIT MODIFICATION TRANSMITTAL FORM Purpuent to 310 CMR 40.0725 (Subpart G)

Number 78715

OTHER MINOR PERMIT MODIFICATIONS: (comminued)	
Check have if liming an additional Release Tracking Number(s) to a Tier I Perture filling of a Major Permit Mexistention application (BWSC 10). List Release 1	nit, where there has been NO change in conditions that requires.
onite any other Minor Permit Modifications proposed. Provide relevant informati	•
Company of the compan	
· y	
4)	
,	ia .
LSP OPINION:	* *
An LSP Opinion is required only if this submitted is materially incon or distribute the content or metaling of, an LSP Op	sistent with, or would otherwise serve to compremise
er detailed the pairs and benefities of being hat I have belowing or or or	•
TOPOTO SEE LICENSE CONTRACTOR OF THE PROPERTY	have the properties from the fill the sentitude of Ears in 1922 LMK
nments accompanying this but much; if my professional opinion is belief. (ii) the applicable provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the provisions of 306 CMR 4.02(Z) and (3), and (iii) the applicable provisions of 306 CMR 4.02(Z) and (3), and	Visions of M.G.L. s. 21 E and 310 CMR 40,0000.
n mann that glockleant penaltiss may teaut, including, but not limited to, possib	-1
e hamusic or materially incomplete.	• ***
Check here if the Response Action(s) on which this epinion is based, if any, is severed by DEP or PPA. If the box is checked, you MUST affect a statement	tie (welle) subject to any order(s), partition (4), and/or approval(5)  ation tilying the applicable provided a first but (4).
issued by DEP or EPA. If the box is checked, you MUST unbech a stalement  P Name: Tohn Drobinski Laps: 2196  suphone: 1617-267 8377  Ed: 785	THO MASSON
PName: 1011 762 0322 745	Stamp: JOHN
lephone: (617-207 0377 Ed. 703	DROBINSKI )
x toppo d	- NO. 2196
	GISTER STA
12/10/00	SITE PROFES
PERMITTEE SUBMITTING MINOR PERMIT MODIFICATION REQ	*
1/ 1/20/21/20/1	نا <b>و</b> ادا غ
Pull-od [1] CAllanthy	MANAGER-RES
	THE TOTAL STATE OF THE STATE OF
	7962
MORRISTOWN	State NV ZIP COOK 0796C
alophone: 973-455- Ext. 964	2 FAX: (optional) 913-457-2906
RELATIONSHIP TO SITE OF PERMITTEE SUBMITTING MINO	R PERMIT MODIFICATION REGIJEST; (check one)
RP of PRP Specific Owner & Operator O Generator O	Transporter Other RP at PRP:
Fiduciary, Secured Londer or Municipality with Exempt Status (as defined by	y M.G.L c; 21E, B. 2)
Agency or Public Utility on a Right of Way (as defined by M.G.L. o. 21 E. s.	5(1)
Any Other Person Submitting Milner Permit Medification Request Specify	Relationship:
Da Not Aller	This Follow



11/10/00. 13:15

### Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-109 Release Tracking Number

→→→ WOODBURY NY

TIER I MINOR PERMIT MODIFICATION TRANSMITTAL FORM Pursuant to 310 CMR 40.0725 (Subpart G)

Permit Number

IF THIS MINOR PERMIT MODIFICATION AFFECTS A MULTI-PARTY PERMIT, ALL PERMITTEES MUST SIGN THE IF THIS MINUN PERMIT MUDIFICATION AFFECTS A MULTI-PARTT PERMIT, ALL FERMITTEES MUST SIGN THE CERTIFICATION SHOWN IN SECTION L. ADDITIONAL PERMITTEES MAY MAKE A COPY OF THIS PAGE, SIGN THE

CERTIFICATION SHOWN IN SECTION L. ADDITIONAL PER CERTIFICATION AND PROVIDE A MAILING ADDITIONAL PER	
CERTIFICATION OF PERMITTEE SUBMITTING MINOR PERMITTER SUBMITTING MINOR PERMITTEE SUBMITTING MINOR PERMITTING MINOR PERMI	ins and penalties of perjury (i) that I have personally examined and am comments accompanying this transmitted form, (ii) that, based on my inquity material information contained in this submitted is, to the best of my indicated to make this attestation on behalf of the entity legally responsible for orized to make this attestation on behalf of the entity legally responsible for our aware that there are significant penalties, including, but not limited to complete information.  Trite:  December 6, 2000
Street:	Siste: ZIP Code!
City/Town;Ext.:	FAX: (optional)
Telephone:	THIS FORM OR DEP MAY RETURN THE DOCUMENT AS
YOU MUST COMPLETE ALL RELEVANT SECTIONS O INCOMPLETE. UNLESS YOU ARE CONTACTED B IS PRESUMPTIVELY APPROVED BO DAYS AFTER	F THIS FORM OR DEP MAY RETURN THE DOCUMENT AS Y DEP, THIS MINOR PERMIT MODIFICATION REQUEST RECEIPT BY DEP, PURSUANT TO 310 CMR 40.0724(4).

### Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup (BWSC)

		HERTE	LIMIT	·- ··· ··· ··· ··· ··· ··· ··· ··· ···	
This Permit is Iss	ued to:			For DEP	Use Only
☑ One Permittee				Effective Date	:
☐ More than One	Permittee*			Expiration Dat	e:
*A list of all Permit	ees is attached.				· · · · · · · · · · · · · · · · · · ·
One Permittee:					
Name of Organization: Permittee Name : Allied-	Signal, Inc.				
Title or c/o: Mr. Robert J. Street: P.O. Box 2105	Ford, Director-Si	te Remedia	ation		· · · · · · · · · · · · · · · · · · ·
Street: P.O. Box 2105 City/Town: Morristown		State:	NJ	Zip code:	07962-2105
Telephone:	<del> </del>	_ 0.0.0.			
DEP Finding Cor	_				<i>:</i>
☐ Tier IA (BWSC01)	☑ Tier IB (B	SWC02)	☐ Tier IC (E	BWSC03) Pe	rmit No. 78715
This permit author	izes the performa	nce of con	nprehensive re	medial response a	actions at:
Disposal Site Number:	1-0079	-1-			<u> </u>
Disposal Site Name: For	mer Besley/Benc	lix Site			
Street: Laurel Avenue		Ctoto	Ma	Zip code:	01301
City/Town: Greenfield		_ State:	IVId	Zip code.	01301

This permit shall expire one (1) year from its effective date.

### Permit Conditions: Pursuant to 310 CMR 40.0740:

- (1) The permitee(s) performing response actions pursuant to this Tier I Permit shall comply at all times with M.G.L. c. 21E, 310 CMR 40.0000, the terms and conditions of the permit and any other applicable federal, state or local law.
- (2) In every proceeding, the burden shall be on the Permittee to demonstrate compliance with the terms and conditions of a permit at all times.
- (3) Each Permittee shall comply with:
  - (a) submittal of a Class A, B or C Response Action Outcome Statement within five years of the effective date of the permit, unless otherwise provided in the permit;
  - (b) submittal of a copy of the signed and completed Permit Acceptance Statement required by 310 CMR 40.0750(2) to the Chief Municipal Officer(s) and the local boards of health for the communities where the disposal site is located, and to any member of the public identified in the Department's Statement of Basis.
  - (c) notification in writing to the Department:
    - 1. as required in 310 CMR 40.0500;
    - upon gaining knowledge of any technical, financial or legal inability to perform any necessary response action, in accordance with 310 CMR 40.0172:
    - 3. upon a decision by a permittee who is performing response actions as an Other Person to not proceed as required by the permit; and
    - of any change in the LSP of Record for the disposal site no later than ten days after the effective date of such change through the filing of a Minor Permit Modification by the permittee in accordance with 310 CMR 40.0725;
  - (d) compliance with:
    - 1. all applicable submittal requirements, including but not limited to, scopes of work, Status Reports, Completion Statements, Phase Reports, and RAOs;
    - 2. all requirements for record keeping and document retention, including but not limited to 310 CMR 40.0014, 310 CMR 40.0022 and 310 CMR 40.0023;
    - the Notification Regulations, 310 CMR 40.0300, in the event of discovery of new releases located at the disposal site, threat of release or Imminent Hazard;
    - the management procedures for excavated soils and wastes and requirements for remedial air emissions set forth in 310 CMR 40.0030 and 310 CMR 40.0040; and
    - 5. all public involvement activities required by 310 CMR 40.1400 through 40.1406;
  - (e) inclusion of the Disposal Site Number and the permit number on documents submitted to the Department with respect to the disposal site;
  - (f) certification of documents submitted to the Department as required by 310 CMR 40.0009;
  - (g) evaluation of the need to perform Immediate Response Actions in accordance with 310 CMR 40.0400 as new or additional information about the disposal site is obtained;
  - (h) modification or cessation of any response action as necessary to maintain compliance with any permit condition or to prevent an actual or potential threat to health, safety, public welfare, or the environment;
  - (i) notification, orally or in writing, to the Department within seventy-two hours of obtaining knowledge of the need to modify or cease any response actions for the reasons in

310 CMR 40.0740(3)(h); provided that any such oral notification shall be confirmed by the permittee in writing within sixty days of such oral notice and any written notice shall include a Status Report prepared by an LSP; and timely remediation of any adverse impacts to health, safety, public welfare or the environment that result from the performance of response actions;

- (j) at disposal sites where groundwater investigation is necessary, delineation of the vertical and horizontal extent of contamination, identification and confirmation of groundwater flow directions, identification of groundwater migration pathways, including but not limited to, the identification of possible partitioning of dissolved volatile organic compounds at the water table interface which may lead to vapor transport into subsurface structures, homes or other occupied or unoccupied buildings, and monitoring of groundwater wells, discharges and/or other monitoring points in a manner which provides for the timely development or representative information about conditions and changes in conditions at the disposal site;
- (k) acquisition of all required federal, state and local permits;
- (I) proper operation and maintenance of all treatment, storage, abatement or control systems and of all equipment required to continue or complete response actions;
- (m) authorization for personnel and authorized agents of the Department to enter, at reasonable times and upon the presentation of credentials, any premises owned or controlled by the permittee for the purpose of investigating, sampling, or inspecting any records, conditions, equipment, practice or property relating to response actions at the disposal site, or protecting health, safety, public welfare, or the environment; and
- (n) notification upon a change of the Primary representative as required by 310 CMR 40.0703(7), if one is designated.
- (4) A Tier I Permit does not grant any property rights or exclusive privileges, nor does it authorize any injury to private property or invasion of property rights.

### Special Conditions; Pursuant to 310 CMR 40.0740(3)(o):

Each	permittee	shall	comply	with	all	Special	Conditions	if	attached	to	this	permit	in
Attac	hment A.	Specia	al Condi	tions :	are	included	within this pe	rm	it				

☑ Yes\* □ No

\*Note: Pursuant to 310 CMR 40.0722(6)(c), a "Statement of Basis" for this permit decision has been prepared by DEP if special conditions are included with this Permit.

### **DEP Authorization**

Issued by the Department of Environmental Protection:

Name (Print):	Alan Weinberg	Date of Issuance:	
Signature:			

### Notice of Appeal Rights

Any person aggrieved by a decision of the Department with respect to any Tier I permit application may request an adjudicatory hearing before the Department in accordance with M.G.L. c. 21E and 310 CMR 40.0050 and 40.0770, within 21 days of the date of issusnce of the Tier I permit, if:

- a) the Department issues a permit for a classification higher than that stated in the LSP Tier Classification Opinion; or
- b) the Department denies the applicant a permit, unless the Department notifies the applicant in the permit decision that the Department intends to undertake or arrange for the performance of necessary response actions at the disposal site; or
- c) The Department imposes conditions pursuant to 310 CMR 40.0730(1)(h) and 40.0740(3)(o) without the applicant's consent.

### Permit Acceptance Statement and Certification of Submittal

**Note:** Each Permittee must complete this section and return the signed Permit Acceptance Statement and Certification of Submittal within 30 days of the date of issuance of this Permit decision. For disposal sites with more than one Permittee, make copies of this section, have each Permittee complete this information, and submit all copies to the Department along with the Acceptance Statement.

### Permit Acceptance Statement

I accept this permit and agree to conduct all response actions at this disposal site in accordance with this Permit and the provisions of 310 CMR 40.0000. I am aware of the requirements set forth in 310 CMR 40.0172 for notifying the Department in the event that I am unable to proceed with such response actions<sup>(1)</sup>.

Name (Print):

Position or title: Signature:

Date:

ROBERT J. FORD

DIRECTOR REMEDIATION & EVALUATION SERVICES

ROBERT J. FORD

3/3/199

Certification of Submittal (The above permittee must also sign the following certification)

ROBERT J. FORD, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this submittal, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the person or entity legally responsible for this submittal<sup>(1)</sup>. If the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate or incomplete information.

Name (Print):

Position or title: Signature:

Date:

KOBERT J. FORD

3/31/97

### (1) Please Note:

If any person other than those who are legally responsible for this submittal are going to sign the above Acceptance Statement and the Certification of Submittal, a written authorization, from each person(s) or entity(ies) who is/are legally responsible for this submittal, must be attached to this permit.

### 20-60% Peroxide **1ydroden**

### **Hydrogen Peroxide 20-60%**

Material Safety Data Sheet

Chemical: Hydrogen Peroxide 20-60%

NFPA: H=3 F=0 I= 1 S=0X

HMIS: H=3 F=0 R=1 PPE= Supplied by user;

dependent on conditions

MSDS Number:

H2O2-2060-0105

Effective Date:

20 January 2005

issued by:

Solvay Chemicals, Inc. Regulatory Affairs Department

Not valid three years after effective date or after issuance of superseding MSDS, whichever is earlier. French or Spanish translations of this MSDS may be available. Check www.solvaychemicals.us or call Solvay Chemicals, Inc. to verify the latest version or translation availability.

Material Safety Data Sheets contain country specific regulatory information; therefore, the MSDS's provided are for use only by customers of Solvay Chemicals, Inc. in North America. If you are located in a country other than the UnitedStates, please contact the Solvay Group company in your country for MSDS information applicable to your location.

### La Compeny and English the finite in

1.1 Product Name:

Hydrogen Peroxide 20-60%

Chemical Name:

Hydrogen Peroxide, Aqueous Solution

Synonyms:

Hydrogen dioxide, hydroperoxide, peroxide

Chemical Formula:

 $H_2O_2$ 

Molecular Weight:

34

CAS Number:

7722-84-1

**EINECS Number:** 

231-765-0

### Grades/Trade Names:

27.5% - Technical

31% - Electronic , Electronic Low Carbon, UltraPure, UltraPure Plus, Pico-Pure™

35% - Technical, Technical 35/D, Cosmetic, Food, PFP™, Chemical, High Purity Food

40% - Technical

50% - Technical, Technical 50/D, Dilution, Cosmetic, Electronic, Food, PFPTM, UltraPure, Chemical, Chemical LP, SVP-HP®0

<sup>™</sup> SVP-HP\* is a trademark of EKA Chemicals

1.2 Recommended Uses: Used in bleaching textiles, food, hair, paper and other materials; component of rocket propellant; used in the manufacture of a wide range of chemicals, plastics, pharmaceuticals; used in photography, electroplating, water treatment and wastewater treatment.

1.3 Supplier:

Solvay Chemicals, Inc.

PO BOX 27328 Houston, TX 77227-7328 3333 Richmond Ave. Houston, Texas 77098

### Solvay Chemicals



MSDS No. H2O2-2080-0105 Revised 1-20-05 Copyright 2005, Solvay Chemicals, Inc. All Rights Reserved, www.solvaychemicals.us 1,800.765.8292

Interox, Fluorides & Minerals

### **20-60%** Peroxide Varogen

### **Hydrogen Peroxide 20-60%**

Material Safety Data Sheet

1.4 Emergency Telephone Numbers

General: 1-877-765-8292 (Solvay Chemicals, Inc.,)

Emergencies (USA): 1-307-872-6688 (Solvay Chemicals, Green River, WY)

1-281-479-2826 (Solvay Chemicals, Deer Park, TX)

Transportation Emergencies (USA): 1-800-424-9300 (CHEMTREC\*)

Transportation Emergencies (INTERNATIONAL/MARITIME): 1-703-527-3887 (CHEMTREC\*)

Transportation Emergencies (CANADA): 1-613-996-6666 (CANUTEC)

Transportation Emergencies (MEXICO-SETIQ): 91-800-00-214-00 (MEX. REPUBLIC)

-0-11-525-559-1588 (elsewhere)

### recinguation/allownellor or incredient

INGREDIENTS	FORMULA	MOLECULAR WT.	WT. PERCENT	CAS#	EINECS #
Hydrogen Peroxide	$H_2O_2$	34	20-60	7722-84-1	231-765-0
Water	H <sub>2</sub> O	18	balance	7732-18-5	

### **Emergency Overview:**

- Toxicity effects principally related to its corrosive properties.
- Non-combustible, but may contribute to the combustion of other substances and causes violent and sometimes explosive reactions.
- May be fatal if swallowed.
- 3.1 Route of Entry: Inhalation: Yes Skin: Yes Ingestion: Yes

### 3.2 Potential Effects of exposure:

- · Corrosive to mucous membranes, eyes and skin.
- The seriousness of the lesions and the prognosis of intoxication depend directly on the concentration and duration of exposure.

### Inhalation:

- Nose and throat irritation.
- Cough
- In case of repeated or prolonged exposure; risk of sore throat, nose bleeds, chronic bronchitis.

### Eyes:

- Severe eye imitation, watering, redness and swelling of the eyelids.
- · Risk of serious or permanent eye lesions.

### Skin contact:

- Imitation and temporary whitening at contact area.
- Risk of burns.

## Peroxide ydrogen

### **Hydrogen Peroxide 20-60%**

Material Safety Data Sheet

### Ingestion:

- Paleness and cyanosis of the face.
- Severe irritation, risk of burns and perforation of the gastrointestinal tract accompanied by shock.
- · Excessive fluid in the mouth and nose, with risk of suffocation.
- Risk of throat, edema (fluid in lungs) and suffocation.
- Nausea, vomiting (bloody).
- Cough,
- Risk of chemical pneumonitis from product inhalation.

Carcinogenicity: See section 11.3

### General Recommendations:

- In case of product splashing into the eyes and face, treat eyes first.
- Do not dry soiled clothing near an open flame or incandescent heat source.
- Submerge soiled clothing in water prior to drying.

### 4.1 Inhalation:

- Remove the subject from the contaminated area.
- Consult with a physician in case of respiratory symptoms.

### Eyes:

- Flush eyes as soon as possible with running water for 15 minutes, while keeping the eyelids open.
- In the case of difficulty of opening the lids, administer an analgesic eye wash (oxybuprocaine).
- Consult with an ophthalmologist in all cases.

### Skin:

- Remove contaminated shoes, socks and clothing, under a shower if necessary; wash the affected skin with running water.
- Keep warm (blanket), provide clean clothing.
- Consult with a physician in all cases.

### Ingestion:

- · Consult with a physician immediately in all cases.
- · Take to a hospital.

### If the subject is completely conscious:

- Rinse mouth with fresh water.
- Do not give anything to drink.
- Do not induce vomiting.

### If the subject is unconscious:

- NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSIOUS PERSON.
- Loosen collar and tight clothing, lay the victim on his/her left side.
- Oxygen or pulmonary resuscitation if necessary.
- Keep warm (blanket).

### 20-60% Peroxide Varogen

### Hydrogen Peroxide 20-60%

Material Safety Data Sheet

### 4.2 Medical Treatment/Notes to Physician:

Inhalation: Negligible

Eyes: On the advice of the ophthalmologist.

Skin: Usual treatment for burns.

### Ingestion:

- Oxygen therapy via intra-tracheal intubation.
- If necessary, tracheotomy.
- Placement of gastric catheter to release stomach gases.
- Avoid gastric lavage risk of perforation.
- In case of intense pain: inject an I.M. morphornimetic drug (piritramide) before taking to hospital.
- Prevention or treatment for shock and pulmonary edema.
- Urgent digestive endoscopy with aspiration of the product.
- Treatment of gastrointestinal tract burns and resulting effects.

- 5.1 Flash point: Non-flammable.
- 5.2 Auto-ignition

Temperature: Non-flammable.

5.3 Flammability Limits: Non-flammable.

### 5.4 Unusual Fire and Explosion Hazards:

- Oxidizer
- With flammable liquids
- With certain materials (see section 10).
- In case of heating.

### 5.5 Extinguishing Methods

### Common:

- Large quantities of water, water spray.
- No restriction

Inappropriate extinguishing means: No restriction.

### 5.6 Fire Fighting Procedures

### Specific hazards:

- Oxygen released on exothermic decomposition may support combustion in case of surrounding fire.
- Oxidizing agent, may cause spontaneous ignition with combustible materials.
- Contact with flammables may cause fire or explosions.
- Pressure burst may occur due to decomposition in confined spaces/containers.

### Protective measures in case of intervention:

- Evacuate all non-essential personnel.
- Intervention should only be made by personnel who are trained and aware of the hazards of product.

MSDS No. H2O2-2060-0105 Revised 1-20-05 Copyright 2005, Solvay Chemicals, Inc. All Flights Reserved. www.solvaychemicals.us 1.800.765.8292

# Peroxide

### Hydrogen Peroxide 20-60%

Material Safety Data Sheet

- Wear self contained breathing apparatus when in close proximity or in confined spaces.
- When intervention in close proximity, wear full protective acid resistant sult.
- After intervention, proceed to clean the equipment. Take a shower, remove clothing carefully, clean and check.

### Other precautions:

- If safe to do so, remove the exposed containers, or cool with large quantities of water.
- Stay upwind,
- Keep at a safe distance in a protected location.
- Never approach containers which have been exposed to fire, without cooling them sufficiently.

### G. Prodlemakkelase Messins

### 6.1 Precautions:

- Observe protective measures given in section 5 and 8.
- · Isolate area.
- Approach from upwind.
- Avoid materials and products which are incompatible with the product (see section 10).
- If safe to do so, without exposing personnel, try to stop the spillage.
- In case of contact with combustible materials, avoid product drying out by dilution with water.

### 6.2 Cleanup methods:

- If possible dam large quantities of liquid with sand or earth.
- Dilute with large quantities of water.
- Do not add chemical products.
- For disposal methods, refer to section 13.
- In order to avoid the risk of contamination, the recovered product must not be returned to the original tank/container.

### 6.3 Precautions for protection of the environment:

- Immediately notify the appropriate authorities in case of reportable spill.
- The National Transportation Safety Board (NTSB) and Federal Aviation Administration (FAA) have requested the following information be provided:

Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed.

Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

## **Peroxide 20-60%** lydrogen

### Hydrogen Peroxide 20-60%

Material Safety Data Sheet

### Sandingering States and States

### 7.1 Handling:

- Operate in a well-ventilated area.
- Keep away from heat sources.
- Keep away from incompatible products.
- Prevent all contact with organics.
- Use equipment and containers which are compatible with the substance.
- Before all operations, passivate the piping circuits and vessels.
- Never return unused product to storage container.
- Ensure an adequate supply of water is available in the event of an accident.
- Containers and equipment used to handle hydrogen peroxide should be used exclusively for hydrogen peroxide.

### 7.2 Storage;

- Store in a ventilated, cool area.
- Store away from heat sources.
- Keep away from incompatible products (see section 10).
- Keep away from combustible substances.
- Keep in container fitted with safety valve or vent.
- · Keep in original packaging, closed.
- Provide containment diking for storage of the packages and transfer installation.
- Regularly check the condition and temperature of the containers,
- · For bulk storage recommendations, consult Solvay Chemicals, Inc.
- 7.3 Specific Uses: See Section 1.2

### 7.4 Other precautions:

- Warn personnel of the dangers of the product.
- Follow the protective measures given in section 8.
- Do not confine the product in the circuit, between closed valves, or in a container without a vent.
- 7.5 Packaging: Consult Solvay Chemicals for the proper packaging material for specific grades of hydrogen peroxide.
  - Aluminum 99.5 %
  - Stainless steel 304 L and 316 L.

### en Procesus Convioled For Sont Presentions

### 8.1 Exposure Limit Values - Hydrogen peroxide:

Authorized limit Values TLV<sup>a</sup> ACGIH\*-USA (2002) OSHA PEL NIOSH REL (1994)

Hydrogen peroxide

1 ppm TWA

1 ppm TWA

1 ppm TWA

1.4 mg/m³ TWA

1.4 mg/m<sup>a</sup> TWA

1.4 mg/m³ TWA

ACGIH<sup>a</sup> and TLV<sup>a</sup> are registered trademarks of the American Conference of Governmental Industrial Hygienists.

## **Peroxide 20-60%** vdrogen

### Hydrogen Peroxide 20-60%

Material Safety Data Sheet

- 8.2 Exposure Controls:
- 8.2.1 Occupational Exposure Controls:
- 8.2.1.1 Ventilation:
  - Provide local ventilation.
  - · Follow the protective measures given in section 7.
  - Provide ventilation in work areas to keep exposure below applicable limits. See Section 8.1
- **8.2.1.2 Respiratory protection:** NIOSH approved full-face supplied air respirator for excessive concentrations.
- 8.2.1.3 Hand protection: Chemical resistant protective gloves made of PVC or rubber.
- **8.2.1.4 Eye protection:** Wear protective goggles for all industrial operations. If a risk of splashing exists, wear goggles and face shield.
- **8.2.1.5 Skin protection:** Consult your industrial hygienist or safety manager for the selection of personal protective equipment sultable for the working conditions.
- B.3 Other precautions:
  - An eyewash and safety shower should be nearby and ready for use.
  - Use good hygiene practices when handling this product including changing work clothes after use.
  - Do not eat, drink or smoke in areas where this material is handled.
- 8.4 Other information: The National Transportation Safety Board (NTSB) and Federal Aviation Administration (FAA) have requested the following information be provided:

Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

### \$P\$P\$VSIcalian可包harmeateppablishing。

9.1 Appearance: Colorless liquid

Odor: Slightly pungent

9.2 Important Health, Safety and Environmental Information:

pH:

1-4

Change of state:

Melting point:

-33°C (-27°F) for 35% hydrogen peroxide

-52°C (-62°F) for 50% hydrogen peroxide

Boiling point:

108°C (226°F) @ 1.013 bar (760 mmHg) for 35% hydrogen peroxide

115°C (239°F) @ 1.013 bar (760 mmHg) for 50% hydrogen peroxide

**Decomposition Temperature:** 

≥ 60°C (140°F) Self-accelerated

decomposition temperature (SADT) with oxygen release

Flash Point:

Non-Flammable

MSDS No. H202-2060-0105 Revised 1-20-05 Copyright 2005, Solvay Cherricals, Inc. All Rights Reserved. www.solvaychemicals.us 1,800,765,8292

## **Peroxide 20-60%** ydrogen

### Hydrogen Peroxide 20-60%

Material Safety Data Sheet

Flammability:

Non-Flammable

(solid, gas)

Explosive Properties: See Section 4

Oxidizing Properties: Oxidizer, See Section 4

Vapor Pressure:

Total Pressure (H<sub>2</sub>O<sub>2</sub> + H<sub>2</sub>O): 12 mbar (9.0 mmHg) @ 20°C (68°F) for 50% hydrogen peroxide

72 mbar (54 mmHg) @ 50°C (122°F) for 50% hydrogen peroxide

Partial (H2O2):

1 mbar (0.75 mmHg) @ 30°C (86°F) for 50% hydrogen peroxide

Relative Density:

Specific gravity ( $H_2O=1$ ): 1.1 @ 20°C (68°F) for 27.5% hydrogen peroxide

1.2 @ 20°C (68°F) for 50% hydrogen peroxide

Solubility:

Water: Complete in water. Fat: Not Applicable.

Partition coefficient: P (n-octanol/water): Not applicable

Viscosity: 1.07 mPa. s @ 20°C (68°F) for 27,5% hydrogen peroxide

1.17 mPa. s @ 20°C (68°F) for 50% hydrogen peroxide

Vapor Density (air=1): 1.0 for 50% hydrogen peroxide

Evaporation Rate: No data.

9.3 Other Information:

Surface Tension: 74 mN/m @ 20°C (68°F) for 27.5% hydrogen peroxide

75.6 mN/m @ 20°C (68°F) for 50% hydrogen peroxide

Stability: Stable under normal conditions of use with slow gas release.

### 10.1 Conditions to avoid:

- Heat/Sources of heat
- Contamination

### 10.2 Materials and substances to avoid:

- **Acids**
- Bases
- Metals
- Salts of metals
- Reducing agents
- Organic materials
- Flammable substances

10.3 Hazardous decomposition products: Oxygen; Decomposition releases steam and heat.

10.4 Hazardous Polymerization: Will not occur.

10.5 Other information: None.

MSDS No. H2O2-2060-0105 Revised 1-20-05 Copyright 2005, Solvay Chemicals, Inc. All Rights Beserved www.solvaychemicals.us 1,800,765,8292

# iyarogen Peroxide 20-60%

### Hydrogen Peroxide 20-60%

Material Safety Data Sheet

### 11.1 Acute toxicity:

### inhalation:

- Inhalation, LC<sub>50</sub>, 4 hours, rat, 2000 mg/m³
- Inhalation, LC<sub>0</sub>, 1 hour, mouse, 2170 mg/m<sup>3</sup>

### Oral:

- Oral route, LD<sub>501</sub> rat, 1232 mg/kg for 35% hydrogen peroxide
- Oral route, LD<sub>60</sub>, rat, 841 mg/kg for 60% hydrogen peroxide

Dermal: Dermal route, LD<sub>50</sub>, rabbit, > 2000 mg/kg for 35% hydrogen peroxide

### Irritation:

- Rabbit, Serious damage (eyes) for 70% hydrogen peroxide
- Rabbit, Initant (skin) for < 50% hydrogen peroxide</li>
- Rabbit, Corrosive (skin) 1 hour, for 50% hydrogen peroxide
- Mouse, Respiratory irritation (RD<sub>50</sub>), 665 mg/m<sup>3</sup>

Sensitization: Guinea Pig, Nonsensitizing (skin).

### Comments:

- Toxic effect linked with corrosive properties.
- The carcinogenic effect found in animals is not demonstrated in humans

### 11.2 Chronic toxicity:

- In vitro, without metabolic activation, mutagenic effect.
- In vivo, no mutagenic effect.
- Oral route, after prolonged exposure, mouse.
- Target organ: duodenum, carcinogenic effect,
- Dermal route, after prolonged exposure, mouse, no carcinogenic effect.
- Oral route, after prolonged exposure, rat, no carcinogenic effect.
- Oral route, after prolonged exposure, rat/mouse.
- Target organ: gastro-intestinal system, observed effect.
- Inhalation, after repeated exposure, dog, 7 ppm, initating effect.

### 11.3 Carcinogenic Designation:

- IARC (International Agency for Research on Cancer): 3 Not Classifiable as to Carcinogenicity to Humans.
- TLV A3 Animal carcinogen: Agent is carcinogenic in experimental animals at relatively
  high dose, by route(s) of administration, at site(s), of histologic types(s), or by mechanism(s)
  not considered relevant to worker exposure. Available epidemiologic studies do not confirm
  an increased risk of cancer in exposed humans. Available evidence suggests that the
  agent is not likely to cause cancer in humans except under uncommon or unlikely
  routes or levels of exposure.

# **Hydrogen Peroxide 20-60%**

### Hydrogen Peroxide 20-60%

Material Safety Data Sheet

### 12.1 Acute ecotoxicity:

- Fish, Pimephales promelas; LC<sub>50</sub>, 96 hours, 16.4 mg/L; NOEC, 96 hours, 5 mg/L
- Crustaceans, Daphnia pulex; EC<sub>60</sub>, 48 hours, 2.4 mg/L; NOEC, 48 hours, 1 mg/L
- Algae, various species; EC<sub>50</sub>, 72 to 96 hours, 3.7 to 160 mg/L in fresh water
- Algae, Nitzchia closterium; EC<sub>50</sub>, 72 to 96 hours, 0.85 mg/L in salt water
- 12.2 Chronic ecotoxicity: No data.

### 12.3 Mobility:

- Air, Henry's law constant (H) = 1 mPa.m³/mol @ 20°C (68°F) Result: non-significant volatility.
- Air, condensation on contact with water droplets. Result: rain washout.
- Water Non-significant evaporation.
- Soil/sediments Non-significant evaporation and adsorption

### 12.4 Degradation

### Abiotic:

- Air, indirect photo-oxidation, t<sub>s</sub> 10 to 20 hours. Conditions: sensitizer: OH radical.
- Water, redox reaction, t<sub>y</sub> 2.5 days, 10,000 ppm. Conditions: mineral and enzymatic catalysis/fresh water.
- Water, redox reaction, t<sub>½</sub> 20 days, 100 ppm. Conditions: mineral and enzymatic catalysis/fresh water.
- Water, redox reaction, t<sub>k</sub> 60 hours. Conditions: mineral and enzymatic catalysis/salt water.
- Soil, redox reaction, t<sub>k</sub> 15 hour(s). Conditions: mineral catalysis.

### Biotic:

- Aerobic, t<sub>k</sub> < 1 minutes in biological treatment sludge. Result: rapid and considerable biodegradation.
- Aerobic, t<sub>4</sub> between 0.3 to 2 days in fresh water. Result: rapid and considerable blodegradation.
- Effects on biological treatment plants, > 200 mg/l. Result: Inhibitory action.
- 12.5 Potential for bioaccumulation: Result: non-bioaccumulable (enzymatic metabolism).

### 12.6 Other adverse effects /Comments:

 Toxic for aquatic organisms Nevertheless, hazard for the environment is limited due to product properties:

No bioaccumulation.

Considerable abiotic and blotic degradability.

No toxicity of degradation products (H2O and O2).

### ic. Discosi Consideration

- 13.1 Waste treatment: Consult current federal, state and local regulations regarding the proper disposal of this material.
- 13.2 Packaging treatment: Consult current federal, state and local regulations regarding the proper disposal of emptied containers.
- 13.3 RCRA Hazardous Waste: Listed as D001 (Ignitable), D002 (Corrosive)

MSDS No. H202-2080-0105 Revised 1-20-05 Copyright 2005, Solvay Chemicals, Inc. All Rights Reserved.

www.solvaychemicals.us 1.800.765.8292

# **Peroxide Hydrogen**

# Hydrogen Peroxide 20-60%

Material Safety Data Sheet

Mode	DOT	IMDG	IATA
UN Number	UN 2014	UN 2014	UN 2014
Class (Subsidiary)	5.1(8)	5.1(8)	5.1(8)
Proper Shipping Name	Hydrogen Peroxide, aqueous solution	Hydrogen Peroxide, aqueous solution	Hydrogen Peroxide, aqueous solution
Hazard label (Subsidiary	) Oxidizer (Corrosive)	Oxidizing Agent + Corrosive	Oxidizer + Corrosive
Marine Pollutant	No	No	No
Placard (Subsidiary) (	Oxidizer (5.1) [Corrosive (8)]	2014	110
Packing Group		11	11
Reportable Quantity	100 lbs.		
MFAG			
Emergency Info	ERG 140	EmS 5,1-02	ERG Code 5C
Other			Forbidden over 40%

### National Regulations (US)

TSCA Inventory 8(b): Yes

SARA Title III Sec. 302/303 Extremely Hazardous Substances (40 CFR355); Yes,>  $52~\%~{\rm H_2O_2}$ 

- Reportable quantity 1,000 lbs.
- Threshold planning quantity 1,000 lbs.

### SARA Title III Sec. 311/312 (40 CFR 370:

- Hazard Category Yes, Immediate (acute) Health hazard, Fire Hazard
- > 52 % H<sub>2</sub>O<sub>2</sub>
- Threshold planning quantity 500 lbs
- Yes, < 52 % H<sub>2</sub>O<sub>2</sub>
- Threshold planning quantity 10,000 lbs

SARA Title III Sec. 313 Toxic Chemical Emissions Reporting (40 CFR 372): No

CERCLA Hazardous Substance (40CFR Part 302)

Listed: No

Unlisted Substance: Yes, Reportable Quantity 100 lbs Characteristic: Ignitability (D001), Corrosivity (D002)

Other: Occupational Safety and Health Administration (OSHA) requirements for process safety management must be followed anytime at least 7,500 ibs. of hydrogen peroxide at concentrations of at least 52% are used or stored. Refer to 29 CFR 1910.119 for specific details.

### State Component Listing:

State Comment: No Data.

National Regulations (Canada) Canadian DSL Registration: Non Confidential #6754

WHMIS Classification; C Oxidizing material

E Corrosive

F Dangerously reactive material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations,

MSDS No. H2O2-2060-0105 Revised 1-20-05 Copyright 2005, Solvay Chemicals, Inc. All Rights Reserved. www.solvaychemicals.us 1,800,765,8282

# **%09-02** Peroxide lydrogen

### **Hydrogen Peroxide 20-60%**

Material Safety Data Sheet

### Labeling according to Directive 1999/45/EC.

Symbols

C Corrosive

Phrases R

34 Causes burns

Phrases S 1/2 Keep Locked and out of reach of children.

3 Keep in a cool place.

28.1 After contact with skin, wash immediately with plenty of water.

Wear suitable protective clothing and eye/face protection. 36/39

IN case of accident or if you feel unwell, seek medical advice immediately 45

(show the label where possible).

### 16.1 Ratings:

### NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)

Flammability = 0 Instability = 1

### HMIS (HAZARDOUS MATERIAL INFORMATION SYSTEM)

Fire = 0 Reactivity = 1 PPE = Supplied by User, dependent on local conditions Health = 3

16.2 NSF: Material(s) listed for use under NSF/ANSI Standard 60 - Drinking Water Treatment Chemicals - Health Effects have a maximum use in potable water as follows:

Hydrogen Peroxide (31%)[1]

**Product Function** 

Maximum Use

Dechlorination Disinfection & Oxidation

3.4ma/L 3.4mg/L

Hydrogen Peroxide (35%)™

Dechlorination

Disinfection & Oxidation

3ma/L 3mg/L

Hydrogen Peroxide (40%)[9]

Dechlorination

2.6mg/L

Disinfection & Oxidation

2.6mg/L

Hydrogen Peroxide (50%)<sup>№</sup>

Dechlorination Disinfection & Oxidation 2.1mg/L 2.1mg/L

Hydrogen Peroxide (60%)<sup>III</sup>

Dechlorination

1.75mg/L

Disinfection & Oxidation

1.75mg/L

Use of this product shall be followed by chlorination to remove levels of hydrogen peroxide. Chlorine residuals shall not exceed 4 mg/L, the EPA's proposed maximum residual level.

MSD\$ No. H2O2-2060-0105 Revised 1-20-05 Copyright 2005, Solvay Chemicals, Inc. All Rights Reserved. www.solvaychemicals.us 1.800.785.8292

This product may be used for sulfide control and in conjunction with ozone for organic control at a concentration use level of 97 mg/L when followed by chlorination of the treated water,

P This product may be used for sulfide control and in conjunction with ozone for organic control at a concentration use level of 85 mg/L when followed by chlorination of the treated water.

This product may be used for sulfide control and in conjunction with ozone for organic control at a concentration use level of 75 mg/L when followed by chlorination of the treated water.

<sup>14</sup> This product may be used for sulfide control and in conjunction with ozone for organic control at a concentration use level of 60 mg/L when followed by chlorination of the treated water.

This product may be used for sulfide control and in conjunction with ozone for organic control at a concentration use level of 50 mg/L when followed by chlorination of the treated water.

# **Peroxide 20-60%** Iydrogen

# Hydrogen Peroxide 20-60%

Material Safety Data Sheet

### 16.3 Other Information:

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations of mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product).

To our actual knowledge, the information contained herein is accurate as of the date of this document. However, neither Solvay Chemicals, Inc. nor any of its affiliates makes any warranty, express or implied, or accepts any liability in connection with this information or its use. This information is for use by technically skilled persons at their own discretion and risk and does not relate to the use of this product in combination with any other substance or any other process. This is not a license under any patent or other proprietary right. The user alone must finally determine suitability of any information or material for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. This information gives typical properties only and is not to be used for specification purposes. Solvay Chemicals, Inc. reserves the right to make additions, deletions or modifications to the information at any time without prior notification.

TRADEMARKS: allthe trade name of products referenced herein are either trademarks or registered trademarks of Solvay Chemicals, inc. unless otherwise identified.

### 16.3 Reason for revision:

Supersedes edition: Solvay Chemicals MSDS H2O2-2060-0903 dated 1 September 2003. Purpose of revision: Add section 16.2 NSF use information.

MSDS No. H202-2060-0105 Revised 1-20-05 Copyright 2005, Solvay Chemicals, Inc. All Rights Reserved. www.solvaychemicals.us 1.800,765,8292



STL Westfield 53 Southampton Road Westfield, MA 01085

Tel: 413 572 4000 Fax: 413 572 3707 www.stl-inc.com

Richard Galloway Honeywell International 101 Columbia Road (MEY-4) Morristown, NJ 07962

10/18/2005

Report Number: 229910

Dear Richard Galloway,

The analysis of your sample(s) submitted on 09/30/2005 is now complete and the appropriate analytical report is enclosed. The samples were prepared and analyzed according to established methodologies and protocols. All holding times were met for the methods performed on these samples, unless otherwise noted in the report's case narrative.

If you have any questions regarding this report, please contact your Project Manager, Rebecca C. Mason.

For questions, concerns or comments regarding our service, please do not hesitate to contact me directly. Thank you for selecting STL Westfield, and we look forward to working with you on future projects.

Steven C. Hartmann Laboratory Director STL WESTFIELD

Technical Review: 5th 10.19.05

Total number of pages in this report: 54

# SAMPLE INFORMATION Date: 10/18/2005

Job Number.: 229910

Customer...: Honeywell International Attn.....: Richard Galloway

Project Number.....: 20001517
Customer Project ID...: SAMPLING FOR BESLEY Project Description...: Sampling for Besley

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
229910-1	B093005 - Influent	Water	09/30/2005	10:10	09/30/2005	16:39
229910-2	B093005 - Effluent	Water	09/30/2005	11:00	09/30/2005	16:39
229910-3	B093005-Trip Blank	Lab Water	09/29/2005	09:00	09/30/2005	16:39
					,	
		-				
						!
		1				
	·					
						,
			İ			

### LABORATORY TEST RESULTS

Job Number: 229910

Date: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Customer Sample ID: B093005 - Influent

Date Sampled.....: 09/30/2005 Time Sampled.....: 10:10 Sample Matrix....: Water Laboratory Sample ID: 229910-1
Date Received.....: 09/30/2005
Time Received.....: 16:39

		<b>1</b> 000000000000000000000000000000000000	100		(20000000000000000000000000000000000000	100000000000000000000000000000000000000	Mooossass
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TEC
SM18 4500CLF	Chlorine, Tot. Residual	6.4		0.050	mg/L	10/04/05	grb
EPA 160.2	Solids, Total Suspended (TSS)	ND	U	5.0	mg/L	10/04/05	гас
SW846 7196A	Hexavalent Chromium	ND	U	0.0050	mg/L	09/30/05	kmm
SW846 9014(MCP	Cyanide, Total	ND	U	0.010	mg/L	10/06/05	kmm
SW846 7470A	Mercury (CVAA) Liquid Waste Mercury (Hg)	ND	U	0.20	ug/L	10/07/05	bpg
SW846 6010B	Metals Analysis (ICP) Iron (Fe)	64		50	ug/L	10/17/05	bpg
SW846 6010B	Metals Analysis (ICP) Antimony (Sb) Arsenic (As) Cadmium (Cd) Chromium (Cr) Copper (Cu) Lead (Pb) Nickel (Ni) Selenium (Se) Silver (Ag) Zinc (Zn)	ND N		6.0 5.0 1.0 5.0 5.0 10 10 5.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10/13/05 10/13/05 10/13/05 10/13/05 10/13/05 10/13/05 10/13/05 10/13/05 10/13/05 10/13/05	bpg bpg bpg bpg bpg bpg
sw846 8011	GC-Microextraction Microextraction	Complete			Text	10/04/05	pjs
SW846 8270C		ND N		10 50 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05	baf baf baf baf baf baf baf baf baf baf





Page 2

LABORATORY TEST RESULTS

Job Number: 229910

Date: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Customer Sample ID: B093005 - Influent Date Sampled.....: 09/30/2005

Time Sampled....: 10:10 Sample Matrix....: Water

Laboratory Sample ID: 229910-1
Date Received.....: 09/30/2005

Time Received.....: 16:39

Benzo(ghi)perylene	5.0 0.020 1.0	ug/L ug/L	10/07/05
1,2-Dibromoethane (EDB)  Pesticides/PCBs (Organochlorine)  Aroclor 1016  Aroclor 1221  Aroclor 1232  ND  U  ND  ND	1.0	ug/L	10/05/05
EPA 608 Pesticides/PCBs (Organochlorine)  Aroclor 1016  Aroclor 1221  Aroclor 1232  ND  U  ND  ND	1.0	ug/L	10/05/05
Aroclor 1016 ND U Aroclor 1221 ND U Aroclor 1232 ND U			
Aroclor 1221 ND U Aroclor 1232 ND U		L	
Aroclor 1232 ND U		ug/L	10/07/05
177 00001 1232	1.0	ug/L	10/07/05
Angelon 12/2   IAID   UII	1.0	ug/L	10/07/05
111 111	1.0	ug/L	10/07/05
Aroclor 1248 ND U	1.0	ug/L	10/07/05
Aroclor 1254 ND U	1.0	ug/L	10/07/05
Aroclor 1260 ND U	1.0	ug/L	10/07/05
Chlordane, total	0.50	ug/L	10/07/05
W846 8260B Volatile Organics			
Benzene   ND   U	20	ug/L	10/07/05
Toluene   ND   U	20	ug/L	10/07/05
Ethylbenzene ND U	20	ug/L	10/07/05
m&p-Xylenes ND U	20	ug/L	10/07/05
o-Xylene ND U	20	ug/L	10/07/05
1,1-Dichloroethene   ND   U	20	ug/L	10/07/05
Methyl-tert-butyl-ether (MTBE) ND U	20	ug/L	10/07/05
1,1-Dichloroethane   ND   U	20	ug/L	10/07/05
cis-1,2-Dichloroethene 230	20	ug/L	10/07/05
Carbon tetrachloride ND U	20	ug/L	10/07/05
1,2-Dichloroethane   ND   U	20	ug/L	10/07/05
1,3-Dichlorobenzene ND U	20	ug/L	10/07/05
1,4-Dichlorobenzene ND U	20	ug/L	10/07/05
1,2-Dichlorobenzene ND U	20	ug/L	10/07/05
Naphthalene   ND   U	100	ug/L	10/07/05
tert-Butyl alcohol (TBA) ND U	1000	ug/L	10/07/05
tert-Amyl methyl ether (TAME) ND U	100	ug/L	10/07/05
Vinyl chloride ND U	20	ug/L	10/07/05
Acetone ND U	1000	ug/L	10/07/05
Methylene chloride ND U	40	ug/L	10/07/05
1,1,1-Trichloroethane ND U	20	ug/L	10/07/05
Trichloroethene (TCE) 580	20	ug/L	10/07/05
11,11,E 11 tolled octifiate	20	ug/L	10/07/05
Tetrachloroethene ND U	20	ug/L	10/07/05
1,4-Dioxane ND U	1000	ug/L	10/07/05
	ļ		
	ĺ		



Page 3

LABORATORY TEST RESULTS

Job Number: 229910

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

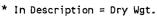
Customer Sample ID: B093005 - Effluent

Date Sampled....: 09/30/2005 Time Sampled....: 11:00 Sample Matrix....: Water

Laboratory Sample ID: 229910-2 Date Received.....: 09/30/2005 Time Received.....: 16:39

Date: 10/18/2005

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SM18 4500CLF	Chlorine, Tot. Residual	0.35	Γ	0.050	mg/L	10/04/05	grb
EPA 160.2	Solids, Total Suspended (TSS)	NĎ	U	5.0	mg/L	10/04/05	гас
SW846 7196A	Hexavalent Chromium	ND	U	0.0050	mg/L	09/30/05	kmm
SW846 9014(MCP	Cyanide, Total	ND	U	0.010	mg/L	10/06/05	kmm
SW846 7470A	Mercury (CVAA) Liquid Waste Mercury (Hg)	ND	υ	0.20	ug/L	10/07/05	bpg
SW846 6010B	Metals Analysis (ICP) Iron (Fe)	68		50	ug/L	10/17/05	bpg
SW846 6010B	Metals Analysis (ICP) Antimony (Sb) Arsenic (As) Cadmium (Cd) Chromium (Cr) Copper (Cu) Lead (Pb) Nickel (Ni) Selenium (Se) Silver (Ag) Zinc (Zn)	ND ND ND ND ND ND ND ND ND ND ND		6.0 5.0 1.0 5.0 5.0 5.0 10 10	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10/17/05 10/17/05 10/17/05 10/17/05 10/17/05 10/17/05 10/17/05 10/17/05 10/17/05 10/17/05	pba pba pba pba pba pba pba
SW846 8011	GC-Microextraction Microextraction	Complete			Text	10/04/05	pjs
	Semivolatile Organics Phenol Pentachlorophenol Naphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Bis(2-ethylhexyl)phthalate Benzo(b)fluoranthene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene	ND N		10 50 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05 10/07/05	baf baf baf baf baf baf baf baf baf baf





Page 4

Fax: (413) 572-3707

LABORATORY TEST RESULTS

Job Number: 229910

Date: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Customer Sample ID: B093005 - Effluent

Date Sampled.....: 09/30/2005 Time Sampled.....: 11:00 Sample Matrix....: Water Laboratory Sample ID: 229910-2 Date Received.....: 09/30/2005 Time Received.....: 16:39

			100			<u> </u>	<b>1</b>
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
		116	1000	F 0		40.407.405	L - 4
	Benzo(ghi)perylene	ND	U	5.0	ug/L	10/07/05	pat
SW846 8011	GC Micro-Extractable Volatiles					Į	
38040 0011	1,2-Dibromoethane (EDB)	ND	lυ	0.020	ug/L	10/05/05	nis
	1,2 bibliomoethalie (200)	1"5	ľ	0.020	dg/ L	10,05,05	ا درم
EPA 608	Pesticides/PCBs (Organochlorine)		Ш				
	Aroclor 1016	ND	lυ	1.0	ug/L	10/07/05	jcs
	Aroclor 1221	ND	υ	1.0	ug/L	10/07/05	jcs
	Aroclor 1232	ND	U	1.0	ug/L	10/07/05	
	Aroclor 1242	ND	U	1.0	ug/L	10/07/05	
	Aroclor 1248	ND	U	1.0	ug/L	10/07/05	
	Aroclor 1254	ND	U	1.0	ug/L	10/07/05	
	Aroclor 1260	ND	U	1.0	ug/L	10/07/05	
	Chlordane, total	ND	U	0.50	ug/L	10/07/05	l lcs
SW846 8260B	Volatile Organics	1			í		
3W04D 0ZDUB	Benzene	ND	υ	1.0	ug/L	10/07/05	blu l
	Toluene	ND	IJ	1.0	ug/L ug/L	10/07/05	hlw
	Ethylbenzene	ND	U	1.0	ug/L	10/07/05	
	m&p-Xylenes	ND	U	1.0	ug/L	10/07/05	
	o-Xylene	ND	U	1.0	ug/L	10/07/05	
	1,1-Dichloroethene	ND	U	1.0	ug/L	10/07/05	
İ	Methyl-tert-butyl-ether (MTBE)	ND	Ιu	1.0	ug/L	10/07/05	
ĺ	1,1-Dichloroethane	ND	u	1.0	ug/L	10/07/05	
	cis-1,2-Dichloroethene	ND	U	1.0	ug/L	10/07/05	blw
	Carbon tetrachloride	ND	υ	1.0	ug/L	10/07/05	blw
	1,2-Dichloroethane	ND	υ	1.0	ug/L	10/07/05	
	1,3-Dichlorobenzene	ND	U.	1.0	ug/L	10/07/05	
	1,4-Dichlorobenzene	ND ND	U	1.0 1.0	ug/L	10/07/05	
	1,2-Dichlorobenzene Naphthalene	ND	U	5.0	ug/L ug/L	10/07/05 10/07/05	blu l
	tert-Butyl alcohol (TBA)	ND	انا	50	ug/L ug/L	10/07/05	hlu
	tert-Amyl methyl ether (TAME)	ND	اتا	5.0	ug/L	10/07/05	
	Vinyl chloride	ND	ΙŭΙ	1.0	ug/L	10/07/05	blw
	Acetone	ND	ΙŪΙ	50	ug/L	10/07/05	blw
	Methylene chloride	ND	υ	2.0	ug/L	10/07/05	
	1,1,1-Trichloroethane	4.4		1.0	ug/L	10/07/05	
	Trichloroethene (TCE)	ND	U	1.0	ug/L	10/07/05	blw
	1,1,2-Trichloroethane	ND	U	1.0	ug/L	10/07/05	blw
	Tetrachloroethene	ND	U	1.0	ug/L	10/07/05	
	1,4-Dioxane	ND	U	50	ug/L	10/07/05	prm
				i			
				}			
					į		
				ļ	1		
				ļ			
						ļ	_





MADEP MA014 RIDOH57

CTDPH 0494 VT DECWSD NH DES 253903-A LABORATORY TEST RESULTS

Job Number: 229910

Date: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Customer Sample ID: B093005-Trip Blank

Date Sampled....: 09/29/2005 Time Sampled....: 09:00 Sample Matrix....: Lab Water Laboratory Sample ID: 229910-3 Date Received.....: 09/30/2005 Time Received.....: 16:39

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	Q	REPORTING LIMIT	UNITS	DATE	TECH
SW846 8260B	Volatile Organics Benzene Toluene Ethylbenzene m&p-Xylenes o-Xylene 1,1-Dichloroethene Methyl-tert-butyl-ether (MTBE) 1,1-Dichloroethane cis-1,2-Dichloroethene Carbon tetrachloride 1,2-Dichloroethane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene Naphthalene tert-Butyl alcohol (TBA) tert-Amyl methyl ether (TAME) Vinyl chloride Acetone Methylene chloride 1,1,1-Trichloroethane Trichloroethene (TCE) 1,1,2-Trichloroethane Tetrachloroethene 1,4-Dioxane			1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	10/07/05 10/07/05	
						•	



### LABORATORY CHRONICLE

Job Number: 229910

Date: 10/18/2005

		·····						
CUSTOMER: Honeywe	ll International PROJEC	T: SAMPLI	NG FOR E	ESLEY	j	ATTN: Richard (	Galloway	
		······································				<u> </u>	<u> </u>	
Lab ID: 229910-1	Client ID: B093005 - Influent			30/2005		Date: 09/30/20		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME AN	NALYZED	DILUTION
3010A	Acid Digestion, Total (ICP)	1	50654			10/03/2005	0000	
SM18 4500CLF	Chlorine,(DPD)	1	50927			10/04/2005	0000	
SW846 9014(MCP		1	50858			10/06/2005	0000	
SW8469010A MCP		1	50786			10/05/2005	0000	
SW846 3510C	Extraction Sep. Funnel (SVOC)	1	50760			10/04/2005	0000	
EPA 608 Extr.	Extraction Sep. Funnel Prep for EPA 608		50903			10/06/2005	0000	
SW846 8011	GC Micro-Extractable Volatiles	1	50773			10/05/2005	0242	
SW846 8011	GC-Microextraction	1	50747			10/04/2005	0000	
SW846 7196A	Hexavalent Chromium Mercury (CVAA) Aqueous Preparation Mercury (CVAA) Liquid Waste Metals Analysis (ICP) Metals Analysis (ICP) Pesticides/PCBs (Organochlorine) Semivolatile Organics	1	50725			09/30/2005	1800	
SW846 7470A	Mercury (CVAA) Aqueous Preparation	1	50840			10/05/2005	1443	
SW846 7470A	Mercury (CVAA) Liquid Waste	1	51091	50840		10/07/2005	1524	
SW846 6010B	Metals Analysis (ICP)	1	51289	50654		10/13/2005	1628	
SW846 6010B	Metals Analysis (ICP)	1	51420	50654		10/17/2005	1624	
EPA 608	Pesticides/PCBs (Organochlorine)	1	51015	50903		10/07/2005	2325	
SW846 8270C			51025	50760		10/07/2005	1954	
EPA 160.2	Solids, Total Suspended (TSS)	1	50847			10/04/2005	0000	
	Special Instructions	1	50959			40.440.43005	0000	
	Special Instructions	1	51017			10/10/2005	0000	20
SW846 8260B	Volatile Organics	1	50954			10/07/2005	0825	20
Lab ID: 229910-2	Client ID: B093005 - Effluent	Date Re	cvd: 09/	30/2005	Sample	Date: 09/30/20	005	
METHOD	DESCRIPTION			PREP BT		DATE/TIME AN		DILUTION
3010A	Acid Digestion, Total (ICP)	1	50654			10/03/2005	0000	
SM18 4500CLF	Chlorine, (DPD)	1	50927			10/04/2005	0000	
SW846 9014(MCP		1	50858			10/06/2005	0000	
SW8469010A MCP	•	1	50786			10/05/2005	0000	
SW846 3510C	Extraction Sep. Funnel (SVOC)	1	50760			10/04/2005	0000	
EPA 608 Extr.	Extraction Sep. Funnel Prep for EPA 608	1	50903			10/06/2005	0000	
SW846 8011	GC Micro-Extractable Volatiles	1	50773			10/05/2005	0257	
SW846 8011	GC-Microextraction	1	50747			10/04/2005	0000	
SW846 7196A	Hexavalent Chromium	1	50725			09/30/2005	1800	
SW846 7470A	Mercury (CVAA) Aqueous Preparation	1	50840			10/05/2005	1500	
SW846 7470A	Mercury (CVAA) Liquid Waste	1	51091	50840		10/07/2005	1527	
SW846 6010B	Metals Analysis (ICP)	1	51420	50654		10/17/2005	1723	
SW846 6010B	Metals Analysis (ICP)	1	51395	50654		10/17/2005	1826	
EPA 608	Metals Analysis (ICP) Pesticides/PCBs (Organochlorine) Semivolatile Organics	1	51015	50903		10/07/2005	2350	
SW846 8270C	Semivolatile Organics	1	51025	50760		10/07/2005	2032 .	
EPA 160.2	Solids, Total Suspended (TSS)	1	50847			10/04/2005	0000	j
	Special Instructions Special Instructions	1	50959					
		1	51017			10/10/2005	0000	
SW846 8260B	Volatile Organics	1	50954			10/07/2005	0849	1
Lab ID: 229910-3	Client ID: B093005-Trip Blank	Data Po	cvd. nov	30/2005	Sample	Date: 09/29/20	105	
METHOD	DESCRIPTION	PIIN#	RATCH#	PREP BT	#(S)	DATE/TIME AN	IAI Y7FN	DILUTION
METHOD	Special Instructions	1	51075	I KLF DI	m(3)	10/07/2005	1000	DIEGITOR
SW846 8260B	Volatile Organics	i	50954			10/07/2005	0912	1
011010 02000		,	20/24			10,01,2003	~ , i =	•





NELAP FL E87912 TOX NELAP NJ MA008 TOX NELAP NY 10843 NY DOH 10843

### SURROGATE RECOVERIES REPORT

Job Number.: 229910

Report Date.: 10/18/2005

	٠.	-	-:-			_		 	•	٠.	90	٠.	0.0						940		20	99		99	•	90				***
-	13	С.	T-F	'n	16	D		 м	'n	n	_	٠.	M.	10	٠I	: 1	٠.	-		- 1			•	,				m	'n	33
	v	Ψ.		и:	ΊE	А	200	ш.	v	1.	-		ж.	ŧΞ		20				ж		_	1	1.1	а			и.	Q	***

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Method: Pesticides/PCBs (Organochlorine) Batch(s): 51015				od Code. Matrix.	: 608 : Water	Prep Batch: 50903 Equipment Code:
ab ID	DT	Sample ID	Date	DCB	TCX	
D -			10/08/2005	156.5	144.0	
cs			10/08/2005	83.4	86.3	
3			10/08/2005	125.3	94.5	
29910- 1		B093005 - Influent	10/07/2005	114.1	94.7	
29910- 2		B093005 - Effluent	10/07/2005	110.6	94.9	
· est	Test Des	scription	Limits			
		probiphenyl (surr)	30.0 - 150.			
CX	Tetrachi	.oro-m-xylene (surr)	30.0 - 150.			



MADEP MA014 RIDOH57 CTDPH 0494 VT DECWSD NH DES 253903-A



### SURROGATE RECOVERIES REPORT

Job Number.: 229910

Report Date.: 10/18/2005

			ional

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

		: Volatile Organics : 50954			d Code Matrix	Prep Batch: Equipment Code: VHPMS1		
Lab ID	DT	Sample ID		Date	12DCED	DBRFLM	TOLD8	
.CD				10/07/2005	104.7	102.7	98.9	
LCS				10/07/2005	106.5	102.3	100.8	
MB				10/07/2005	100.0	99.2	98.8	
229910- 1		B093005 - Influent		10/07/2005	103.7	99.4	99.7	
229910- 2	2	B093005 - Effluent		10/07/2005	100.4	100.5	95.2	
229910- 3	;	B093005-Trip Blank		10/07/2005	100.4	100.2	95.2	
Test	Test De	scription	Limits					
12DCED		hloroethane-d4 (surr)	70.0 - 130					
DBRFLM		fluoromethane (surr)	70.0 - 130	-				
TOLD8	Toluene	-d8 (surr)	70.0 - 130	١.				



### SURROGATE RECOVERIES REPORT

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY	ATTN: Richard Galloway

	Method: Semivolatile Organics Batch(s): 51025			Method Code: 8270 Test Matrix: Water				Prep Ba Equipme	50760 EHPGC1		
Lab ID	****	D	Sample ID		Date	246TBP	2FLUBP	2FLUPH	NITRD5	PHEND5	TERD14
LCD LCS MB 229910- 229910-	1 2		B093005 - Influent B093005 - Effluent		10/04/2005 10/04/2005 10/04/2005 10/07/2005 10/07/2005	75.9 74.7 73.7 33.1 33.8	74.3 70.7 69.2 31.6 34.0	43.7 34.8 34.7 20.4 20.2	72.1 65.4 70.8 31.9 34.1	32.7 25.0 30.9 13.0* 12.7*	73.4 73.3 76.9 52.6 54.6
Test	Ţ	est De	escription	Limits							
246TBP 2FLUBP 2FLUPH NITRD5 PHEND5 TERD14	2 2 N P	-Fluor -Fluor itrobe henol	Tribromophenol (surr) robiphenyl (surr) rophenol (surr) enzene-d5 (surr) -d5 (surr) nyl-d14 (surr)	15.0 - 110 30.0 - 130 15.0 - 110 30.0 - 130 15.0 - 110 30.0 - 130	). ). ).						

MADEP MA014 RIDOH57 CTDPH 0494 VT DECWSD NH DES 253903-A



Job Number .: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Description QC Type

Reag. Code

Lab ID

Dilution Factor

Time Date

Test Method....: SW846 8270C

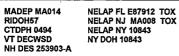
Method Description.: Semivolatile Organics

Batch..... 51025

Analyst...: baf

LCD Laboratory Control Samp	ole Duplicate	E051	SPK058	50760		10	/04/2005 1607
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits F
Phenol	ug/L	14.960	11.460	40.000	10.000		30.0-130.0 *
Naphthalene	ug/L	24.750	22.180	40.000	5.000	26.5 J 61.9 11.0	20.0 40.0-140.0 20.0
Acenaphthylene	ug/L	31.200	30.010	40.000	5.000 (	J 78.0	40.0-140.0
Acenaphthene	ug/L <sub>.</sub>	27.580	26.520	40.000	5.000	3.9 J 69.0 3.9	20.0 40.0-140.0 20.0
Fluorene	ug/L	27.510	27.390	40.000	5.000	J 68.8	40.0-140.0
Pentachlorophenol	ug/L	27.810 J	28.390	J 40.000	50.000 l	0.4 J 69.5 2.1	20.0 30.0-130.0 20.0
Phenanthrene	ug/L	29,630	29.440	40.000	5.000 t	74.1 0.6	40.0-140.0
Anthracene	ug/L	30.070	30.110	40.000	5.000 t		20.0 40.0-140.0 20.0
Fluoranthene	ug/L	28.650	28.840	40.000	5.000 l	J 71.6	40.0-140.0
Pyrene	ug/L	30.360	29.390	40.000	5.000 l	0.7 J 75.9 3.2	20.0 40.0-140.0 20.0
Benzo(a)anthracene	ug/L	27.910	27.730	40.000	5.000	J 69.8	40.0-140.0
Chrysene	ug/L	27.850	27.590	40.000	5.000 t	0.6 J 69.6 0.9	20.0 40.0-140.0 20.0
Bis(2-ethylhexyl)phthalate	ug/L	28.110	28.140	40.000	10.000 l	70.3 0.1	40.0-140.0 20.0
Benzo(b)fluoranthene	ug/L	29.260	27.950	40.000	5.000 l	73.2 4.6	40.0-140.0 20.0
Benzo(k)fluoranthene	ug/L	32.250	33.500	40.000	5.000 l	J 80.6	40.0-140.0
Benzo(a)pyrene	ug/L	30.190	30.050	40.000	5.000	3.8 J 75.5 0.5	20.0 40.0-140.0 20.0
Indeno(1,2,3-cd)pyrene	ug/L	26.070	25.650	40.000	5.000 t	J 65.2	40.0-140.0
Dibenzo(a,h)anthracene	ug/L	26.670	26.170	40.000	5.000 l	1.6 J 66.7 1.9	20.0 40.0-140.0 20.0
Benzo(ghi)perylene	ug/L	23.880	23.500	40.000	5.000 t	J 59.7 1.6	40.0-140.0 20.0







Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

QC Type Description

Reag. Code

Dilution Factor

Date Time

Test Method....: SW846 8270C

Method Description.: Semivolatile Organics

Batch..... 51025

Lab ID

Analyst...: baf

LCS Laboratory Control Samp	ole	E05	ISPK058	50760		10	0/04/2005 1522
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits F
Phenol	ug/L	11.460		40.000	10.000 L	28.6	30-130 *
Naphthalene	ug/L	22.180		40.000	5.000 U	J 55.5	40-140
Acenaphthylene	ug/L	30.010		40.000	5.000 L	J 75.0	40-140
Acenaphthene	ug/L	26.520		40.000	5.000 L	J 66.3	40-140
Fluorene	ug/L	27.390		40.000	5.000 L	1 68.5	40-140
Pentachlorophenol	ug/L	28.390	J	40.000	50.000 L	71.0	30-130
Phenanthrene	ug/L	29.440		40.000	5.000 L	73.6	40-140
Anthracene	ug/L	30.110		40.000	5.000 L	<i>7</i> 5.3	40-140
Fluoranthene	ug/L	28.840		40.000	5.000 L	72.1	40-140
Pyrene	ug/L	29.390		40.000	5.000 L	J <b>73.</b> 5	40-140
Benzo(a)anthracene	ug/L	27 <b>.7</b> 30		40.000	5.000 L	J 69 <b>.</b> 3	40-140
Chrysene	ug/L	27.590		40.000	5.000 L	J 69.0	40-140
Bis(2-ethylhexyl)phthalate	ug/L	28.140		40.000	10.000 L	70.3	40-140
Benzo(b)fluoranthene	ug/L	27.950		40.000	5.000 L	1 69.9	40-140
Benzo(k)fluoranthene	ug/L	33.500		40.000	5.000 U	83.8	40-140
Benzo(a)pyrene	ug/L	30.050		40.000	5.000 U	75.1	40-140
Indeno(1,2,3-cd)pyrene	ug/L	25.650		40.000	5.000 U	J 64.1	40-140
Dibenzo(a,h)anthracene	ug/L	26.170		40.000	5.000 U	1 65.4	40-140
Benzo(ghi)perylene	ug/L	23.500		40.000	5.000 U	58.8	40-140









Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC Type Description Reag. Code Lab ID Dilution Factor Date Time

Test Method.....: SW846 8270C

Method Description:: Semivolatile Organics Batch...... 51025

Analyst...: baf

MB Method Blank					50760			10	/04/	2005 143	58
Parameter/Test Description	Units	QC Result		QC Result	True Value	Orig.	Value	QC Calc.	*	Limits	F
Phenol	ug/L	10.000	Ū.								
Naphthalene	ug/L	5.000	U								
Acenaphthylene	ug/L	5.000	U								
Acenaphthene	ug/L	5.000	U								
Fluorene	ug/L	5.000	U								
Pentachlorophenol	ug/L	50.000	U								
Phenanthrene	ug/L	5.000	U								
Anthracene	ug/L	5.000	U								
Fluoranthene	ug/L	5.000	U								
Pyrene	ug/L	5.000	U								
Benzo(a)anthracene	ug/L	5.000	U								
Chrysene	ug/L	5.000	U								
Bis(2-ethylhexyl)phthalate	ug/L	10.000	U								
Benzo(b)fluoranthene	ug/L	5.000	U								
Benzo(k)fluoranthene	ug/L	5.000	U								
Benzo(a)pyrene	ug/L	5.000	U								
Indeno(1,2,3-cd)pyrene	ug/L	5.000	U								
Dibenzo(a,h)anthracene	ug/L	5.000	U								
Benzo(ghi)perylene	ug/L	5.000	U								







	Q U A Job Number.: 229910	LITY CONTROL R		Report Date.: 10/	18/2005	
CUSTOMER: Ho	neywell International	PROJECT: SAMPLING FOR BE	SLEY	ATTN: Richard Gal	loway	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date I	іле

Test Method.....: SW846 8011 Analyst...: pjs Method Description.: GC Micro-Extractable Volatiles Batch..... 50773

LCD Laboratory Control Samp	ole Duplicat	e \$041	HSPK303		10,	/04/2005 2154
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value QC Calc.	* Limits F
1,2-Dibromoethane (EDB)	ug/L	0.305	0.286	0.251	0.020 U 121.5	70.0-130.0



	Q U Job Number.: 229910	ALITY	CONTROL R		Report Date.: 10/	18/2005	
CUSTOMER: H	oneywell International	PROJECT	r: SAMPLING FOR BE	SLEY	ATTN: Richard Gal	oway	
QC Type	Description		Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: SW846 8011

Method Description:: GC Micro-Extractable Volatiles

Batch.....: 50773

ECS Laboratory Control Samp	ste .	S041	ISPK303		1	0/04/2005 2137
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value QC Calc.	* Limits F
1.2-Dibromoethane (EDB)	ug/L	0.286		0.251	0.020 U 113.9	70-130

MADEP MA014 RIDOH57 CTDPH 0494 VT DECWSD NH DES 253903-A



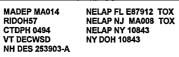
Job	Q U A L Number.: 229910	ITY	CONTROL	RESULTS	Report Date.: 10/1	8/2005	
CUSTOMER: Honeywa	ell International	PROJEC	CT: SAMPLING FOR	BESLEY	ATTN: Richard Gall	oway	
QC Type	Description	<u></u>	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: SW846 8011 Analyst...: pjs Batch..... 50773 Method Description.: GC Micro-Extractable Volatiles

MB Method Blank							10	/04/2	2005 212	2.
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. V	alue G	C Calc.	*	Limits	F
1,2-Dibromoethane (EDB)	ug/L	0.020 U								



	Job Number.: 229910	QUA	LITY CO	NTROL R	ESULTS	Report Date.: 10/	18/2005
CUSTOMER: H	Honeywell International		PROJECT: S	AMPLING FOR BES	SLEY	ATTN: Richard Gal	loway
QC Type	Descripti	on		Reag. Code	Lab ID	Dilution Factor	Date Tim
	d: SW846 8011 cription.: GC Micro-Extrac	table Volat	iles	Batch	: 50773	Analy	st: pjs
MS	Matrix Spike		S0	4HSPK303	229761-7		10/04/2005 23
Para	meter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value QC Ca	lc. * Limits
1,2-Dibromoe	ethane (EDB)	ug/L	0.294		0.251	0.020 U 117	% 65-135
MS	Matrix Spike		SO	4HSPK303	229762-3		10/05/2005 01
Para	ameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value QC Ca	lc. * Limits
.2-Dibromoe	ethane (EDB)	ug/L	0.291		0.251	0.020 U 116	% 65-135





Job	Number.: 229910	QUALITY	CONTRO	OL RESUL		ort Date.: 10/	18/2005	
CUSTOMER: Honeywe	ll International	PROJE	ECT: SAMPLING	FOR BESLEY	ATT	N: Richard Gal	loway	
QC Type	Description		Reag. Co	ode Lab	ID Di	lution Factor	Date	Time
Test Method	: SW846 8011					Analy	st: pis	

Test Method.....: SW846 8011

Method Description:: GC Micro-Extractable Volatiles

Batch....: 50773

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits
2-Dibromoethane (EDB)	ug/L	0.290	0.294	0.251	0.020 U	116 1	65-135 20

MSD Matrix Spike Duplicate		5041	ISPK303	229762-3	10	/05/2005 0156
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value QC Calc.	* Limits F
1,2-Dibromoethane (EDB)	ug/L	0.298	0.291	0.251	0.020 U 119 2	65-135 20



		Job Number.: 229910	QUALITY	CONTROL R		Report Date.: 10/	18/2005	
200000000	CUSTOMER: Ho	oneywell International	PROJECT	r: SAMPLING FOR BE	SLEY	ATTN: Richard Gal	loway	
ſ	QC Type	Description		Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: EPA 608

Method Description: Pesticides/PCBs (Organochlorine)

Batch.....: 51015

LCD Laboratory Control Samp	ole Duplicate	e E051	WRK005	50903		10	/08/2005 0	128
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
Aroclor 1016 Aroclor 1260	ug/L ug/L	2.533 2.595	2.257 2.297	-	1.000 U 1.000 U			

	Job Number.: 229910	QUALITY	CONTR	ROLR		Report Date.: 10,	18/2005	
CUSTOMER: H	oneywell International	PROJECT	: SAMPLIN	IG FOR BE	SLEY	ATTN: Richard Ga	loway	
QC Type	Description	1	Reag.	Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: EPA 608
Method Description: Pesticides/PCBs (Organochlorine)
Batch....: 51015

LCS Laboratory Control Sam	ple	E05	IWRK005	50903		10	/08/	2005 01(	03
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Aroclor 1016 Aroclor 1260	ug/L ug/L	2.257 2.297	<u> </u>		1.000 l 1.000 l				



Reag. Code

Lab ID

Job Number.: 229910

Description

QC Type

Report Date.: 10/18/2005

Dilution Factor

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Date

Time

Test Method.....: EPA 608 Analyst...: jcs
Method Description: Pesticides/PCBs (Organochlorine) Batch.................. 51015

MB Method Blank  Parameter/Test Description	Units	QC Result		QC Result	50903	· Value	Oria	Value	റെ		/UO/ *	2005 003 Limits	
Parameter/Test Description		- WC Kesutt				- value		vatue		- Catc.			
Aroclor 1016	ug/L	1.000	U										
Aroclor 1221	ug/L	1.000	U										
Aroclor 1232	ug/L	1.000	U										
Aroclor 1242	ug/L	1.000	U										
Aroclor 1248	ug/L	1.000	U										
Aroclor 1254	ug/L	1.000	Ü										
Aroclor 1260	ug/L	1.000	U										
Chlordane, total	ug/L	0.500	U										

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Description QC Type

Reag. Code

Lab ID Dilution Factor

Time Date

Test Method.....: SW846 8260B Method Description.: Volatile Organics

Batch..... 50954

Analyst...: blw

LCD Laboratory Control Samp	ole Duplicat	e V041	EWRK001			10	/07/2005 0039
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits F
Vinyl chloride	ug/L	19.620	19.390	20.000	1.000 (		70.0-130.0 25.0
1,1-Dichloroethene	ug/L	19.240	19.060	20.000	1.000 l	1.2 J 96.2 0.9	70.0-130.0 25.0
Acetone	ug/L	269.090	266.500	200.000	50.000 l		70.0-130.0 * 25.0
Methylene chloride	ug/L	18.720	18.670	20.000	2.000 l	93.6 0.3	70.0-130.0 25.0
Methyl-tert-butyl-ether (MTBE)	ug/L	17.360	17.240	20.000	1.000 l		70.0-130.0 25.0
1,1-Dichloroethane	ug/L	19.240	19.180	20.000	ຳ 1.000 ເ		70.0-130.0 25.0
cis-1,2-Dichloroethene	ug/L	19.600	19.330	20.000	1.000 (		70.0-130.0 25.0
1,1,1-Trichloroethane	ug/L	19.370	19.240	20.000	1.000		70.0-130.0 25.0
Carbon tetrachloride	ug/L	20.330	20.310	20.000	1.000 i		70.0-130.0 25.0
Benzene	ug/L	19.090	18.850	20.000	1.000 (		70.0-130.0 25.0
1,2-Dichloroethane	ug/L	18.950	18.820	20.000	1.000 t	94.8 0.7	70.0-130.0 25.0
Trichloroethene (TCE)	ug/L	18.260	18.090	20.000	1.000	91.3 0.9	70.0-130.0 25.0
Toluene	ug/L	18.320	18.540	20.000	1.000	J 91.6 1.2	70.0-130.0 25.0
1,1,2-Trichloroethane	ug/L	18.490	18.940	20.000	1.000	92.5 2.4	70.0-130.0 25.0
Tetrachloroethene	ug/L	19.060	19.430	20.000	1.000	95.3 1.9	70.0-130.0 25.0
Ethylbenzene	ug/L	19.330	18.990	20.000	1.000	J 96.7 1.8	70.0-130.0 25.0
m&p-Xylenes	ug/L	38.670	38.160	40.000	1.000	л 96.7 1.3	70.0-130.0 25.0
o-Xylene	ug/L	19.050	18.620	20.000	1.000 (	J 95.2 2.3	70.0-130.0 25.0
1,3-Dichlorobenzene	ug/L	19.320	19.120	20.000	1.000 (	J 96.6 1.0	70.0-130.0 25.0
1,4-Dichlorobenzene	ug/L	19.090	18.880	20.000	1.000 (	) 95.5 1.1	70.0-130.0 25.0
1,2-Dichlorobenzene	ug/L	18.910	18.650	20.000	1.000 (	94.5 1.4	70.0-130.0 25.0
Naphthalene	ug/L	19.030	19.150	20.000	5.000	J 95.2 0.6	70.0-130.0 25.0
tert-Butyl alcohol (TBA)	ug/L	225.870	236.710	200.000	50.000	J 112.9 4.7	70.0-130.0 25.0
1,4-Dioxane	ug/L	247.020	231.640	200.000	50.000	123.5 6.4	70.0-130.0 25.0
tert-Amyl methyl ether (TAME)	ug/L	18.560	18.210	20.000	5.000 t	5.4 Ј 92.8 1.9	70.0-130.0 25.0

Page 22







Job Number.: 229910

Report Date.: 10/18/2005

Analyst...: blw

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

Lab ID Dilution Factor Time QC Type Description Reag. Code Date

Test Method.....: SW846 8260B Method Description: Volatile Organics Batch..... 50954

LCS Laboratory Control Samp	ole	V04	EWRK001		10,	/07/2005 0015
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value QC Calc.	* Limits F
Vinyl chloride	ug/L	19.390	-	20.000	1.000 U 97.0	70-130
1,1-Dichloroethene	ug/L	19.060	i i	20.000	1.000 U 95.3	70-130
Acetone	ug/L	266.500		200.000	50.000 U 133.2	70-130 *
Methylene chloride	ug/L	18.670		20.000	2.000 U 93.3	70-130
Methyl-tert-butyl-ether (MTBE)	ug/L	17.240		20.000	1.000 U 86.2	70-130
1,1-Dichloroethane	ug/L	19.180		20.000	1.000 U 95.9	70-130
cis-1,2-Dichloroethene	ug/L	19.330		20.000	1.000 U 96.7	70-130
1,1,1-Trichloroethane	ug/L	19.240		20.000	1.000 U 96.2	70-130
Carbon tetrachloride	ug/L	20.310		20.000	1.000 U 101.5	70-130
Benzene	ug/L	18.850		20.000	1.000 U 94.2	70-130
1,2-Dichloroethane	ug/L	18.820		20.000	1.000 U 94.1	70-130
Trichloroethene (TCE)	ug/L	18.090		20.000	1.000 U 90.5	70-130
Toluene	ug/L	18.540		20.000	1.000 U 92.7	70-130
1,1,2-Trichloroethane	ug/L	18.940		20.000	1.000 U 94.7	70-130
Tetrachloroethene	ug/L	19.430		20.000	1.000 U 97.2	70-130
Ethylbenzene	ug/L	18.990		20.000	1.000 U 95.0	70-130
m&p-Xylenes	ug/L	38.160		40.000	· 1.000 U 95.4	70-130
o-Xyl ene	ug/L	18.620		20.000	1.000 U 93.1	70-130
1,3-Dichlorobenzene	ug/L	19.120		20.000	1.000 U 95.6	70-130
1,4-Dichlorobenzene	ug/L	18.880		20.000	1.000 U 94.4	70-130
1,2-Dichlorobenzene	ug/L	18.650		20.000	1.000 U 93.2	70-130
Naphthalene	ug/L	19.150		20.000	5.000 U 95.8	70-130
tert-Butyl alcohol (TBA)	ug/L	236.710		200.000	50.000 U 118.4	70-130
1,4-Dioxane	ug/L	231.640		200.000	50.000 U 115.8	70-130
tert-Amyl methyl ether (TAME)	ug/L	18.210		20.000	5.000 U 91.0	70-130

NELAP FL E87912 TOX NELAP NJ MA008 TOX NELAP NY 10843 NY DOH 10843

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Lab ID QC Type Description Reag. Code Dilution Factor Date Time

Test Method.....: SW846 8260B

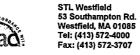
Method Description.: Volatile Organics Batch..... 50954 Analyst...: blw

MB Method Blank									10	/07/	2005 012	25
Parameter/Test Description	Units	QC Result		QC Result	Tru	e Value	Orig.	Value	QC Calc.	*	Limits	F
Vinyl chloride	ug/L	1.000	U									
1,1-Dichloroethene	ug/L	1.000	Ų									
Acetone	ug/L	50.000	U									
Methylene chloride	ug/L	2,000	Ü									
Methyl-tert-butyl-ether (MTBE)	ug/L	1.000	U									
1,1-Dichloroethane	ug/L	1.000	U									
cis-1,2-Dichloroethene	ug/L	1.000	U									
1,1,1-Trichloroethane	ug/L	1.000	U									
Carbon tetrachloride	ug/L	1.000	U									
Benzene	ug/L	1.000	U									
1,2-Dichloroethane	ug/L	1.000	U									
Trichloroethene (TCE)	ug/L	1.000	U									
Toluene	ug/L	1.000	U									
1,1,2-Trichloroethane	ug/L	1.000	U									
Tetrachloroethene	ug/L	1.000	U									
Ethylbenzene	ug/L	1.000	U									
m&p-Xylenes	ug/L	1.000	U									
o-Xylene	ug/L	1.000	U									
1,3-Dichlorobenzene	ug/L	1.000	U									
1,4-Dichlorobenzene	ug/L	1.000	U									
1,2-Dichlorobenzene	ug/L	1.000	U									
Naphthalene	ug/L	5.000	U									
tert-Butyl alcohol (TBA)	ug/L	50.000	U									
1,4-Dioxane	ug/L	50.000	U									
tert-Amyl methyl ether (TAME)	ug/L	5.000	U									









Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Ho	oneywell International PROJEC	T: SAMPLING FOR BE	SLEY	ATTN: Richard Gal	.oway	
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: \$W846 6010B

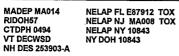
Method Description.: Metals Analysis (ICP)

Batch..... 51289

Analyst...: bpg

LCD Laboratory Control Sam	ole Duplicat	e M05	ISPK009	50654		10	/13/2005 1533
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits F
Antimony (Sb)	ug/L	1027.17	1031.15	1000.00		102.7	80.0-120.0
Arsenic (As)	ug/L	1041.53	1022.52	1000.00		0.4 104.2 1.8	20.0 80.0-120.0 20.0
Cadmium (Cd)	ug/L	1007.17	990.50	1000.00		100.7 1.7	80.0-120.0 20.0
Chromium (Cr)	ug/L	982.15	968.75	1000.00		98.2 1.4	80.0-120.0
Copper (Cu)	ug/L	963.84	953.48	1000.00		96.4 1.1	20.0 80.0-120.0
Lead (Pb)	ug/L	995.09	984.38	1000.00		99.5	20.0 80.0-120.0
Nickel (Ni)	ug/L	929.16	911.52	1000.00		1.1 92.9	20.0 80.0-120.0
Selenium (Se)	ug/L	964.60	956.33	1000.00		1.9 96.5	20.0 80.0-120.0
Silver (Ag)	ug/L	205.11	203.34	200.00		0.9 102.6	20.0 80.0-120.0
Zinc (Zn)	ug/L	961.62	941.67	1000.00		0.9 96.2 2.1	20.0 80.0-120.0 20.0







Job Number.: 229910

QUALITY CONTROL RESULTS

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC Type Description Reag. Code Lab ID Dilution Factor Date Time

Test Method.....: SW846 6010B

Method Description.: Metals Analysis (ICP)

Batch........... 51289

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
Antimony (Sb)	ug/L	1031.15		1000.00		103.1		80-120
Arsenic (As)	ug/L	1022.52		1000.00		102.3		80-120
Cadmium (Cd)	ug/L	990.50		1000.00		99.1		80-120
Chromium (Cr)	ug/L	968.75		1000.00		96.9		80-120
Copper (Cu)	ug/L	953.48		1000.00		95.3		80-120
.ead (Pb)	ug/L	984.38		1000.00		98.4		80-120
lickel (Ni)	ug/L	911.52		1000.00		91.2		80-120
Selenium (Se)	ug/L	956.33		1000.00		95.6		80-120
Silver (Ag)	ug/L	203.34		200.00		101.7		80-120
Zinc (Zn)	ug/L	941.67		1000.00		94.2		80-120

Page 26

Analyst...: bpg

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC Type Description Reag. Code Lab ID Dilution Factor Date Time

Test Method.....: SW846 6010B

Method Description.: Metals Analysis (ICP)

Batch........... 51289

Analyst...: bpg

MB Method Blank										10	/13/	2005 11	21
Parameter/Test Description	Units	QC Result		QC Result	True	Value	Orig.	Value	QC	Calc.	*	Limits	F
Antimony (Sb)	ug/L	6.00	 U										
Arsenic (As)	ug/L	10.00	U										
Cadmium (Cd)	ug/L	1.00	Ü										
Chromium (Cr)	ug/L	5.00	U										
Copper (Cu)	ug/L	10.00	U										
Lead (Pb)	ug/L	5.00	U										
Nickel (Ni)	ug/L	10.00	U										
Selenium (Se)	ug/L	10.00	U										
Silver (Ag)	ug/L	5.00	Ü										
Zinc (Zn)	ug/L	50.00	U										

Danamatan/Tant Danamintian	11-24-	00 0		20 2	-				1			
Parameter/Test Description	Units	QC Result		QC Result	Irue	Value	Orig.	Value	QC Calc.	*	Limits	
Antimony (Sb)	ug/L	6.00					-					
Arsenic (As)	ug/L	10.00	U									
Cadmium (Cd)	ug/L	1.00	U									
Chromium (Cr)	ug/L	5.00	U									
Copper (Cu)	ug/L	10.00	U									
Lead (Pb)	ug/L	5.00	U									
Nickel (Ni)	ug/L	10.00	U									
Selenium (Se)	ug/L	10.00	U									
Silver (Ag)	ug/L	5.00	U									
Zinc (Zn)	ug/L	50.00	Ū									

Job Number.: 229910

Report Date.: 10/18/2005

Analyst...: bpg

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC Type Description Reag. Code Lab ID Dilution Factor Date Time

Test Method.....: SW846 6010B

Method Description.: Metals Analysis (ICP) Batch..... 51289

MD Sample Duplicate				229705-10	11	0/13/2005 1551
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value QC Calc.	* Limits F
Antimony (Sb)	ug/L	6.00	U		6.00 U 0.0	20.0
Arsenic (As)	ug/L	10.00	U		10.00 U 0.0	20.0
Cadmium (Cd)	ug/L	1.00	U		1.00 U 0.0	20.0

Parameter/Test Description	Units	QC Result		QC Result	True Value	Orig. Valu	ıe	QC Calc.	* L	imits.	F
Antimony (Sb)	ug/L	6.00				6.00	 U	0.0	20	0.0	
Arsenic (As)	ug/L	10.00	U			10.00	Ū	0.0		0.0	
Cadmium (Cd)	ug/L	1.00	U			1.00	Ū	0.0		.0	
Chromium (Cr)	ug/L	5.00	U			5.00		0.0		.0	
Copper (Cu)	ug/L	10.00	U			10.00		0.0	_	.0	
Lead (Pb)	ug/L	5.00	U			5.00	Ú	0.0		.0	
Nickel (Ni)	ug/L	10.00	U			10.00	U	0.0		.0	
Selenium (Se)	ug/L	10.00	U			10.00	Ū	0.0		.0	
Silver (Ag)	ug/L	5.00	υ			5.00	U	0.0		.0	
Zinc (Zn)	ug/L	50.00	U			50.00	Ü	0.0		.0	

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC Type Reag. Code Description Lab ID Dilution Factor Date Time

Test Method.....: SW846 6010B

Analyst...: bpg Method Description.: Metals Analysis (ICP) Batch..... 51289

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits
intimony (Sb)	ug/L	1016.66		1000.00	6.00	101		75-125
rsenic (As)	ug/L	1023.33		1000.00	10.00 t	J 102	%	75-125
admium (Cd)	ug/L	979.69		1000.00	1.00	J 98	%	75-125
hromium (Cr)	ug/L	960.92		1000.00	5.00 l	J 96	%	75-125
opper (Cu)	ug/L	956.18		1000.00	10.00 l	J 96	%	75-125
ead (Pb)	ug/L	970.22		1000.00	5.00 t	J 97	%	75-125
ickel (Ni)	ug/L	906.19		1000.00	10.00 t	J 91	%	75-125
Gelenium (Se)	ug/L	941.75		1000.00	10.00 l	J 94	%	75-125
Gilver (Ag)	ug/L	201.07		200.00	5.00	J 100	%	75-125
Zinc (Zn)	ug/L	935.07		1000.00	50.00 l	J 93	%	75-125



	Job Number.: 229910	QUALITY	CONTROL		Report Date.: 10/	18/2005	
CUSTOMER: Ho	oneywell International	PROJECT	T: SAMPLING FOR B	ESLEY	ATIN: Richard Gal	loway	
QC Type	Description		Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: SW846 6010B

Method Description: Metals Analysis (ICP)

Batch.....: 51420

LCD Laboratory Control Sam	ole Duplicat	e M05	ISPK009	50654		10	/17/2005 1608
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits F
Iron (Fe)	ug/L	1023.35	1011.03	1000.00		102.3 1.2	80.0-120.0 20.0





Q U A L I T Y C O N T R O L R E S U L T S

Job Number.: 229910

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC Type Description Reag. Code Lab ID Dilution Factor Date Time

Test Method.....: SW846 6010B

Method Description: Metals Analysis (ICP)

Batch.....: 51420

LCS Laboratory Control Sam	ple	M05	ISPKOO9	50654		10	)/17/2005 160	5
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Valu	e QC Calc.	* Limits	F
Iron (Fe)	ug/L	1011.03		1000.00		101.1	80-120	



	Job Number.: 229910	QUALITY	CONTROL	ESULTS	Report Date.: 10/	18/2005	
CUSTOMER: Ho	oneywell International	PROJECT	: SAMPLING FOR BE	SLEY	ATTN: Richard Gal	.oway	
QC Type	Description	n	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: SW846 6010B Analyst...: bpg Method Description.: Metals Analysis (ICP) Batch..... 51420

		· ·							
MB Method Blank				50654			10	/17/2005 16	11
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig.	Value	QC Calc.	* Limits	F
Iron (Fe)	ug/l	50.00	1					· <del></del>	



Page 32

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC Type Description Lab ID Dilution Factor Reag. Code Time

Test Method.....: SW846 6010B

Method Description.: Metals Analysis (ICP) Batch..... 51420 Analyst...: bpg

Iron (Fe)	ug/L	50-00 I	1		50.00 U 0.0	20.0
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value QC (	Calc. * Limits F
MD Sample Duplicate				229705-10		10/17/2005 1618

MADEP MA014 RIDOH57 CTDPH 0494 VT DECWSD



Page 33

\* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC Type Lab ID Dilution Factor Description Reag. Code Time

Test Method.....: SW846 6010B

Method Description.: Metals Analysis (ICP) Batch..... 51420 Analyst...: bpg

MS Matrix Spike		M051	ISPK009	229705+10		10/17	/2005 1621
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value Q0	C Calc. *	Limits F
Iron (Fe)	ug/L	1029.12		1000.00	50.00 U 10	01 %	75-125

Page 34

\* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

M	ethod Desci	::::::::::::::::::::::::::::::::::::::	rcury (CVA	A) Liquid Wa	ste		Batch		51091					Analyst Test Code	and the contract of the contra	
QC	Lab ID	Reagent	Units	QC Result		QC Result	True Value	Orig. \	Value	Q	Calc.	F	*	Limits	Date	Time
МВ	50840		ug/L	0.20								_	_		10/07/2005	1509
LCS	50840	M051SPK015	ug/L	4.57			5.00				91.4			80-120	10/07/2005	1512
LCD	50840	M05ISPK015	ug/L	4.45		4.57	5.00				89.0			80.0-120.	10/07/2005	1514
											2.7			20.0		
MS	229507-5	M051SPK015	ug/L	4.75			5.00	0.	.20	U	97		%	75-125	10/07/2005	1519
MD	229507-5		ug/L	0.20	U			0.	.20	U	0.0			20.0	10/07/2005	1522





Page 35

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

20.0

80.0-120. 10/06/2005 0000

92.7

8.2

Me	thod Desc	Fiption: Cy	anide .			Batch	: 50858		Analyst Test Code		
QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F	* Limits	Date	Time
LCS MB		W0511NT002	mg/L mg/L	0.10060 0.01000 U		0.10000		100.6	80-120	10/06/2005	
LCD		W0511NT002	mg/L	0.09270	0.10060	0.10000		92.7	80.0-120.	10/06/2005	

Page 36

%=% REC, R=RPD, A=ABS Diff., D=% Diff.

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International

PROJECT: SAMPLING FOR BESLEY

ATTN: Richard Galloway

Test Method: SW846 7196A - 50725 Analyst - kmm	
Test Method: SW846 7196A Batch: 50725 Analyst: kmm	
Method Description: Hexavalent Chromium Test Code:: CR6	
Parameter Hexavalent Chromium	

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F *	Limits	Date	Time
MB LCD		W04KLCS001	mg/L mg/L	0.00500 U 0.04680	0.04680	0.05000		93.6	80.0-120.	09/30/2005 09/30/2005	
LCS		W04KLCS001	mg/L	0.04680		0.05000		0.0 93.6	20.0 80-120	09/30/2005	1800



Page 37

\* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

Job Number.: 229910

Report Date.: 10/18/2005

CUSTOMER: Honeywell International PROJECT: SAMPLING FOR BESLEY ATTN: Richard Galloway

QC	Lab ID	Reagent	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc. F		Date	Time
LCS		W05JRGT003 W05JRGT003	•	491.00000 495.00000	491.00000	500.00000 500.00000	-	98.2 99.0	85-115 85-115	10/04/2005 10/04/2005	
MB			mg/L	5.00000 u				0.8	20	10/04/2005	0000



%=% REC, R=RPD, A=ABS Diff., D=% Diff.

# VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: STL WESTFIELD		SDG: <u>B093005</u> - Influent
Job No.: 229910		
Lab File ID (Standard): V02528.D	<del></del>	Date Analyzed: 10/06/05
Instrument ID: GCMS#2		Time Analyzed: 2352
GC Column: RTX-VMS	ID: <u>0.25</u> (mm)	Heated Purge: (Y/N) N_

		IS1 FLB		IS2 CLB		IS3 DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	359475	7.52	291710	11.61	133117	13.88
	UPPER LIMIT	718950	8.02	583420	12.11	266234	14.38
	LOWER LIMIT	179738	7.02	145855	11.11	66559	13.38
	SAMPLE	-			·		
	NO.						
	B093005 - Influent	379344	7.52	308481	11.61	137474	13.88
	B093005 - Effluent	377747	7.52	305060	11.61	134427	13.88
	B093005-TripBlank	379276	7.52	305935	11.61	136205	13.88
04 05							
06							
07						·	
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 FLB = FLUOROBENZENE IS2 CLB = CHLOROBENZENE-D5 IS3 DCB = 1,4DICHLOROBENZENE-D4

AREA UPPER LIMIT = +100% of internal standard area AREA LOWER LIMIT = -50% of internal standard area RT UPPER LIMIT = +0.50 minutes of internal standard RT RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag values outside QC limits with an asterisk

FORM VIII VOA

3/90

<sup>\*</sup> Values outside of QC limits.

## QUALITY ASSURANCE METHODS

### REFERENCES AND NOTES

Report Date: 10/18/2005

STL WESTFIELD is part of Severn Trent Laboratories, Inc. Visit us at www.stl-inc.com.

### LABORATORY CERTIFICATIONS:

MADEP MA014, NY NELAC 10843, NJ NELAC MA008 (TOX), FL NELAC E87912 (TOX), CT DPH 0494, NY DOH 10843, NH DES 253901-A, VT DECWSD, RI DOH 57.

### LOCATION:

STL Westfield: 53 Southampton Rd, Westfield, MA 01085. Phone: (413) 572-4000 Fax: (413) 572-3707

STL Service Center: 148 Rangeway Rd. N. Billerica, MA 01862. Phone: (978) 667-1400 Fax: (978) 667-7871

### DATA REPORTING QUALIFIERS AND TERMINOLOGY:

A number of data qualifiers are widely used within the environmental testing industry and may be utilized in our data reports. The majority of the qualifiers have evolved from the EPA Contract Laboratory Program (CLP).

### REPORT COMMENTS:

All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Soil, sediment and sludge sample results are reported on a "dry weight" basis.

Reporting limits are adjusted for sample size used, dilutions and moisture content, if applicable.

The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert.ID# 10843.

According to 40CFR Part 136.3, pH, Total Residual Chlorine and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field analyses, they were not analyzed immediately, but as soon as possible on laboratory receipt.

Analytical result(s) reported as "ND" and/or "U", indicates the analyte was analyzed for but "Not Detected." Analytical result(s) reported as "TNTC" indicates that the microbiological test was "Too Numerous To Count."

### GLOSSARY OF QUALIFIERS:

# Inorganic Qualifiers (Q-column):

U Indicates that the analyte was analyzed for but not detected.

- E Indicates an estimated value due to the presence of interference. When applied to GFAA analysis, indicates the one-point method of addition recovered between 40-85 percent.
- B Indicates an estimated result value. The result was measured between the reporting limit and the method detection limit (MDL).
- H Indicates the compound/element was found in both the sample and its associated laboratory blank. Indicates possible/probable blank contamination.

### Organic Qualifiers (Q-column):

U Indicates that the compound was analyzed for but not detected.

- J Indicates an estimated result value. This qualifier is used when mass spectral data indicated the presence of a compound that meets the identification criteria and the result is less than the specified quantitation limit, but greater than the method detection limit (MDL).
- B Indicates that the compound was found in both the sample and its associated laboratory blank. Indicates possible/probable blank contamination and warns the data user to exercise caution when applying the results to this compound.

D Indicates all compounds identified in an analysis at a secondary dilution factor.

E Indicates that the compound in an analysis has exceeded the instrument linear calibration range.



# QUALITY ASSURANCE METHODS

## REFERENCES AND NOTES

Report Date: 10/18/2005

### GLOSSARY OF TERMS:

- Surrogates (Surrogate Standards): An organic compound, which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but are not normally found in environmental samples. For semi-volatiles and pesticides/Arochlors, surrogate compounds are added to every blank, sample, matrix spike, matrix spiked duplicate, matrix spike blank (LCS), and standard. These compounds are used to evaluate analytical efficiency by measuring recovery. Poor surrogate recovery may indicate a problem with the sample composition.
- Internal Standard: An organic compound, which is similar to the target analyte(s) in chemical composition and behavior in the analytical process. For GC/MS semi-volatiles and volatiles, internal standards are added to every blank, sample, matrix spike, matrix spike duplicate, matrix spike blank (LCS), and standard. Internal standard responses outside of established limits will adversely affect the quantitation and final concentration of target compounds.
- Matrix Spike (MS): An aliquot of a sample (water or soil) fortified (spiked) with known quantities of specific compounds (target analytes) and subjected to the entire analytical procedure in order to indicate the appropriateness of the method for matrix interference by measuring recovery. The spiking occurs prior to sample preparation and analysis. Poor spike recovery may indicate a problem with the sample composition.
- Laboratory Control Sample (LCS): An aliquot of analyte-free reagent water or sand fortifed (spiked) with known quantities of specific compounds (target analytes) and subjected to the entire analytical procedure in order to indicate the appropriateness of the method efficiency.
- Blank: An artificial sample of analyte-free water or solvent, designed to monitor the introduction of contaminates into the analytical process.
- Method Dectection Limit (MDL): The minimum concentration of an analyte or compound that can be measured and reported with 99% confidence that the result concentration is greater than zero.

### Petroleum Hydrocarbon Comments:

The following comments are specific to Diesel Range Organics (DRO), by GC/FID:

- Results for DRO are based on chromatographable portions of the petroleum product. The Carbon Range refers to the approximate chromatographic region covered by the specified petroleum product in straight-chain carbon units between C9-C36.
- Quantitation is based on the average response factors for a series of hydrocarbons standards. The sample result from the DRO fraction is independent of the target compound assignment.
- Samples yielding chromatographic patterns that do not agree with any of the method targets are reported as "unmatched".









# SUBCONTRACTED DATA



STL Chicago 2417 Bond Street University Park, IL 60466

Tel: 708 534 5200 Fax: 708 534 5211 www.stl-inc.com

# SEVERN TRENT LABORATORIES ANALYTICAL REPORT

JOB NUMBER: 240627

Prepared For:

Severn Trent Laboratories Westfield Executive Park 53 Southampton Road Westfield, MA 01085

Project: Westfield

Attention: Becky Mason

Date: 10/10/2005

n S. Milaria for

Name: Bonnie M. Stadelmann

Title: Project Manager

E-Mail: bstadelmann@stl-inc.com

STL Chicago

2417 Bond Street

University Park, IL 60466

PHONE: (708) 534-5200

FAX..: (708) 534-5211

This Report Contains ( ) Pages



# STL Chicago is part of Severn Trent Laboratories, Inc.

SAMPLE INFORMATION Date: 10/10/2005

Job Number.: 240627

Customer...: Severn Trent Laboratories

Attn..... Becky Mason

Project Number..... 20000230

Customer Project ID...: WESTFIELD 229910
Project Description...: Westfield

Laboratory Sample ID	Customer Sample 1D	Samplé Matrix	Dațe Sampled	Time Sampled	Date: Received	Timo Recelved
240627-1	229910-1	Water	09/30/2005	10:10	10/04/2005	08:40
240627-2	229910-2	Water	09/30/2005	11:00	10/04/2005	08:40
				:		

# STL Chicago is part of Severn Trent Laboratories, Inc.

Job Number: 240627

LABORATORY TEST RESULTS

Date:10/10/2005

DUSTOMER: Severa Trent Laboratories

PROJECT: WESTFIELD 225910

ATR: Becky Mason

Customer Sample ID: 229910-1
Date Sampled....: 09/30/2005
Time Sampled....: 10:10
Sample Matrix...: Water

Laboratory Sample ID: 240627-1
Date Received.....: 10/04/2005
Time Received.....: 08:40

TEST METHOD: PARAMETER/TEST DESCRIPTION SAMPLE RESULT Q FLAGS MDL DILUTION BATCH OT DATE/TIME UNITS 1664A O&G/TPH Gravimetric (HEM) TPH, Recoverable (SGT-HEM) 5.5 2.5 5.5 10/07/05 0928 nrp mg/L 162085

<sup>\*</sup> In Description = Dry Wgt.

# STL Chicago is part of Severn Trent Laboratories, Inc.

Job Number: 240627

CUSTOMER: Severn Trent Caboratories

LABGRATORY TEST RESULTS

Date:10/10/2005

ATTN: Becky Mason

Customer Sample ID: 229910-2
Date Sampled....: 09/30/2005
Time Sampled....: 11:00
Sample Matrix....: Water

Laboratory Sample [D: 240627-2 Date Received.....: 10/04/2005 Time Received.....: 08:40

			MD1	la de la companya de	DILUTION	LINITS	BATCH	DI .	DATEYTIME	: ITE
O&G/TPH Gravimetric (HEM) TPH, Recoverable (SGT-HEM)	5.4	u	2.5	5.4	1	mg/L	162085			Ì
					<u>;</u>			:		ļ
		2		:   						
					(U)					
								į		
	TPH, Recoverable (SGT-HEM)	TPH, Recoverable (SGT-HEM)  5.4	TPH, Recoverable (SGT-HEM)  5.4				iTPR Pacaragable (SCT_REN)	itou personale con unu	iTPR Programming (SCT HCR)	if DU Decement to coor units

<sup>\*</sup> In Description = Dry Wgt.

Job	Number: 240627	LABORATORY	СН	bate:	10/10/2005	···		
ÜSTOHER: Severn	Trent Laboratories	PROJECT	. VESTEI	ELD: 2299	Me		ATIN: Becky Mason	
ab ID: 240627-1 METHOD 1664A	Client ID: 229910-1 DESCRIPTION O&G/TPH Gravimetric (HE	EM)	Date Re RUN# 1	BATCH#	04/2005 PREP BT 162085	Sample #(S)	Date: 09/30/2005 DATE/TIME ANALYZED 10/07/2005 0928	DILUTION
ab ID: 240627-2 METHOD 1664A	Client ID: 229910-2 DESCRIPTION O&G/TPH Gravimetric (HE	M)	Date Re RUN# 1	BATCH#	04/2005 PREP BT 162085	Sample #(S)	Date: 09/30/2005 DATE/TIME ANALYZED 10/07/2005 0928	DILUTION
				•				

# OUNTITY ASSURANCE METHODS

# REFERENCES AND NOTES

Report Date: 10/10/2005 ...

### REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
- 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report) Inorganic Qualifiers (Q-Column)

- Analyte was not detected at or above the stated limit.
- Not detected at or above the reporting limit.
- Result is less than the RL, but greater than or equal to the method detection limit.
- Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- Result was determined by the Method of Standard Additions.
- AFCEE: Result is less than the RL, but greater than or equal to the method detection limit. Inorganic Flags (Flag Column)
  - ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
- LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- MSA correlation coefficient is less than 0.995.
- MS, MSD: The analyte present in the original sample is 4 times greater
  - than the matrix spike concentration; therefore, control limits are not applicable.
- SD: Scrial dilution exceeds the control limits.
- MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a
- negative instrument reading lower than the absolute value of the reporting limit.
- MS, MSD: Spike recovery exceeds the upper or lower control limits.
- AS(GFAA) Post-digestion spike was outside 85-115% control limits.
- Organic Qualifiers (Q Column)
- Analyte was not detected at or above the stated limit. U
- ND Compound not detected.

J

- Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Result was qualitatively confirmed, but not quantified,
- Pesticide identification was confirmed by GC/MS. C
- The chromatographic response resembles a typical fuel pattern.
- The chromatographic response does not resemble a typical fuel pattern. 7 E
- Result exceeded calibration range, secondary dilution required.
- AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (fIC) Organic Flags (Flags Column)
- MB: Batch QC is greater than reporting limit.
- ECS, LCD, ELC, ELD, EV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
- EB1, EB2, EB3, MLE: Batch QC is greater than reporting Limit
- A Concentration exceeds the instrument calibration range
- Concentration is below the method Reporting Limit (RL)
- Compound was found in the blank and sample.
- Surrogate or matrix spike recoveries were not obtained because the extract was diluted for
- analysis; also compounds analyzed at a dilution will be flagged with a D.
- Н Alternate peak selection upon analytical review
- 1 Indicates the presence of an interfence, recovery is not calculated.
- М Manually integrated compound.
- Р The lower of the two values is reported when the % difference between the results of two GC columns is

# QUALITY ASSUBANCE METHODS

# REFERENCES AND NOTES

Report Date: 10/10/2005

```
greater than 25%.
 Abbreviations
 AS
           Post Digestion Spike (GFAA Samples - See Note 1 bclow)
          Designation given to identify a specific extraction, digestion, preparation set, or analysis set
 Batch
           Capillary Column CCB Continuing Calibration Blank
 CAP
 CCV
           Continuing Calibration Verification
 CF
          Confirmation analysis of original
 C1
          Confirmation analysis of A1 or D1
 CZ
          Confirmation analysis of A2 or D2
 c3
          Confirmation analysis of A3 or D3
 ÇRA
          Low Level Standard Check - GFAA; Mercury
 CRI
          Low Level Standard Check - ICP
 C٧
          Calilbration Verification Standard
 Dil Fac
          Dilution Factor - Secondary dilution analysis
 D1
          Dilution 1
 n2
          Dilution 2
 D3
          Dilution 3
 DLFac
          Detection Limit Factor
 DSH
          Distilled Standard - High Level
          Distilled Standard - Low Level
 DSL
 DSM
          Distilled Standard - Medium Level
 EB1
          Extraction Blank 1
 EB2
          Extraction Blank 2
 E83
          DI Blank
ELC
          Method Extracted LCS
ELD
          Method Extracted LCD
 ICAL
          Initial calibration
 1¢B
          Initial Calibration Blank
ICV
          Initial Calibration Verification
 IDL
          Instrument Detection Limit
ISA
          Interference Check Sample A - ICAP
ISB
          Interference Check Sample B - ICAP
         The first six digits of the sample ID which refers to a specific client, project and sample group
Job No.
          Lab ID An 8 number unique taboratory identification
LCD
          Laboratory Control Standard Duplicate
          Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
LC$
MB
          Method Blank or (PB) Preparation Blank
MD
          Method Duplicate
MOL
         Method Detection Limit
MLE
         Medium Level Extraction Blank
MRI
         Method Reporting Limit Standard
MSA
         Method of Standard Additions
MS
         Matrix Spike
MSD
         Matrix Spike Duplicate
ND
         Not Detected
PREPF
         Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS
         Post Digestion Spike (ICAP)
RA
         Re-analysis of original
A1
         Re-analysis of D1
A2
         Re-analysis of 02
A3
         Re-analysis of D3
RD
         Re-extraction of dilution
RE
         Re-extraction of original
RC
         Re-extraction Confirmation
RL
         Reporting Limit
RPD
         Relative Percent Difference of duplicate (unrounded) analyses
RRF
         Relative Response Factor
RT
         Retention Time
```

# O U A L T T Y · A S S U R A N C E · M E T H O D S

# REFERENCES AND MOTES

Report Date: 10/10/2005

Retention Time Window Sample ID A 9 digit number unique for each sample, the first RTW six digits are referred as the job number SCB Seeded Control Blank SD Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL) UCB Unseeded Control Blank Second Source Verification Standard SSV SLCS Solid Laboratory Control Standard(LCS) PHC pH Calibration Check LCSP pH Laboratory Control Sample LCDP pH Laboratory Control Sample Duplicate MDPH pH Sample Duplicate MDFP Flashpoint Sample Duplicate LCFP Flashpoint LCS **G1** Gelex Check Standard Range 0-1 Gelex Check Standard Range 1-10 G2 **G**3 Gelex Check Standard Range 10-100 Gelex Check Standard Range 100-1000 Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA) Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.

240627

RE: Subcontracting Chain of Custody

STL WF PM:

Rebecca C. Mason

Telephone Number:

413-572-4000

PO/Job#:

229910

Client:

Honeywell International

Final Report Due Date: 10/10/2005 by 3pm

Report Type:

batch OC

EDD Type:

none

QC Billable:

N

#qms8 Sample I.D. Sampled Time

Ż

B093005 - Influent

09/30/2005

1010

B093005 - Effluent

09/30/2005

1100

Please run QC on sample:

Mthds Method Description

Sample Distribution

#of

Analytical Mthd

Method 1664

Unit Price

Total Cost

Extended

1664 TPH

1-2

2

Matrix:

groundwater

Bottle Type & Number: amber liter

Ship To:

STL Chicago

Ship Date:

10/3/05

Special Instructions:

Relinquished By:

Signature:

Received By:

Signature:

Relinquished By:

Signature:

Received By: Signature:

Date:

Date:

Time:

Date:

Time:

Please send a sample confirmation report upon sample receipt.

rpjsckl Job Sa	ample Receipt Checklist Report	V2
	C List Number.: 1 Description.: Description.: Sampling for Besley Contact.: Richard Galloway	Date of the Report: 09/30/2005 Project Manager: bcm
Questions ?	(Y/N) Comments	
Chain-of-Custody Present?	Y	
If "yes", completed properly?	Y	
Custody seal on shipping container?	N	
If "yes", custody seal intact?	••	
Custody seals on sample containers?	N	
If "yes", custody seal intact?		
Samples iced?	Υ	
Temperature of cooler acceptable? (4 deg C +/- 2	). Y	
Temperature at receipt	4.6 C	
Samples received intact (good condition)?	Y	
Volatile samples acceptable? (no headspace)	Y	
Is a Trip Blank required?	Y	
Was a Trip Blank provided?	Y	
Correct containers used?	Y	
Adequate sample volume provided?	Y	
Samples preserved correctly?	Y	
Samples received within holding-time?	Y	
Agreement between COC and sample labels?	Y	
Comments	stl pickup	
If samples were shipped was there an air bill #?	11.	
Sample Custodian Signature/Date	kar 09302005 VAN 9/38/05	
This is Page 1(A)	·	

# Severn Trent Laboratories, Inc. **Chain of Custody Form**



24148

229910

●53 Southampton Road Westfield MA 01085 (P) 413-572-4000 (F) 413-572-3707

STL Westfield

•149 Rangeway Road N. Billerica, MA 01862 (P) 978-667-1400 (F) 978-667-7871

Client:	11		-											·	87	en en e	$\cdot \lambda^{-}$	$r_{\lambda}$	JC	)	Car 200 Sept 1	********	STL Westfield STL Billerica / Sc	ervice Center
l <sup>*</sup>	Honorwell		•		_	roject	#:	<u> 365</u>	202	00	<u>43</u>					ob#	ঞ				Quote		PO#	
Address:	<u>101 Col</u>	mbia B	2d		Project Manager: R. Calloway								0	Shaded areas for office use										
}	Morrist	1 Auc	ノゴ	Work ID: Besly Product.								$\exists$	Analysis Reduested							Comments (Special Instructions)				
Phone:		Fax:			- · ·	Contact Alik A 0.11							<sub>a</sub>	Check analysis and specify method and analytes in comments section.							(Opecial instructions)			
	Turnaround Time						Contact: Mike Aphilbaum & MAC  Regulatory Classification   Special Report Format							C. ER	Liforexample:							Please print legibility. If the analytical		
					NPDES		fication   Special Report Format inking Water   QA/QC Report								500-series or drinking water 600-series for waste water, NPDES							requests are not clearly defined on the		
STANDARD RUSH				RCRA — MCP GW1/S1 — DQE (MCP) Rpt —								- 6 8	6000-series for groundwater, soil, waste 8000-series for groundwater, soil, waste Use comments section contriber define.							chain-of-custody, the turnaround time				
Sample Typ	ne Corles	(Lab Appr	roval Req	uired)	Other					DE	EP È	orm(	s)	~	_   0	se 🖫	nn <u>e</u> ni	is sec	iou (a)	further	define	ie	will begin after all questions have be satisfactorily answered.	een
WW-Wastev	water DW-Drink	ing water SV	V-Surface	water		- [-]			Pre	eserv	ativ	е	60	冱	E/6	دا		1				TT		
LW-Lab wat S-Solid / So	ter GW-Grour	ndwater A-	Air				1 ;	<u>6</u>				T	¶ĝ			1	上	2 2			၂၀		Refer & Methods	2
3-301ld / 30	il SL-Sludge	O-OII Z	-Other	<del></del>	Date	4	1.	H 388	8	H2\$04 to pH <2 HCI to pH <2	12		1624	/602	/ Herbi	٦	/ GRO / ET	7,7	11.5		/ Toc	ĕ		
				,,	Time	المر	Comp. # Containers	Plastic(P) or Glass VaHSO4/MEOH	<u>*</u>	된상	냝	. إ			25 / st /	1	þγ	5/ <u>₹</u>	General Chemistry	<u>g</u>	, g	Radchem / Other	and requirements provided to las by MACTEC	-
	Sample	D .		ر قور	Collected	^ I&L	tai	£ 2	9	흥 품	힐	္တုိ	5 5	9 8	voa 525 / Pest	1	Φ\	<b>3/</b> 3	1	용	Grease	E.		
		m mag.	Sample Type	Sampler's Initials	There I I	Grab	Comp Cont	E Sign	HNO3 to pH	않을	동	Na2S203	Volatiles 524	Volatiles 601	Semivoa 525 PCB / Pest	11		Metals (6010)	1 2	Bacteriologica	Toxicity Oil & Gr	Che	51 MACTEC	
	and the second second	300 g 3	~   Ø F	\ <u>\</u> % =	0 35 5	_ তি	3 #	를 <mark>함</mark>	[至]	외오	R N	g g	3 3		S S	<b>]</b> [	946	Metals (6)		Bao	희흥	Rad		
B093	005- To	fluent	GN	MAA	9-30-0	$\frac{1}{2}$	4	d		X			lх	]  1	١ [									
	- 1 Av. 1	1.00				<u> </u>	1_1	7	1-1	-	Н,	$\mathcal{J}$	f	+	4	╁╴	-	-	+-			+-,	•	
A STATE OF STATE		jar	-   -	<del>                                     </del>		$\Box \Delta$	3	<u>G</u>			L	X	L	X									· .	
				1 1		$- \chi $	2	دا				X	4			Ţ-			T -		$\top$			
	78/34/2				1 2.	-  -	+~+		++	+	$\vdash$	-1-	1-	+/	<del></del>	-				-	-	$\sqcup$	$\mathcal{L}_{\mathcal{L}}$	
		<del></del>	$-\bot\bot$				Ш	<u> </u>				7	4		X		1				1			
						- <b> </b> \d	२	6		/		7	Τ			X			_		1	$\Box$		
			1			-1/}-	$\neg$		+-+	-		- -	_	$\vdash \vdash$	-		+	_	44	_	<u> </u>	$\sqcup$		
- <u>-                                  </u>								P	1 1		[	X					XI,	*					# 	
						47		P	V			1	1		<b>⊤</b> ∵		,	<u>,                                    </u>	+	7	+	H		
						- /-		1	$\Lambda$			- -	Ŀ		<u> </u>		_/	X _	$\perp$			Ш		
						17	11	P	-		XΙ		İ		1		ŀ	x	1	•				
· L	. J.	, (et e)						ρ					十		<del> </del>	$\vdash$	_	7		e +	╁	Н		
		<del></del>	$ \forall$	$-\mathbf{v}$		- Y -	++	4			_	_ Z	<b>!</b>		4				X		_ _			
-							-	_				*	4							_		_	9/30/05 WM	
Sampled by		· · · · · · · · · · · · · · · · · · ·					Sign	ature:	Baile	<u> </u>	<u></u>	1	1					+	لبل		٠		h	
<b>MA/</b> Relinguishe	<del>/</del>					ne.	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	^	MAP	۲									1.13			2	Cooler 27 N MADEP Require	ment
	. •	. '		Date:	Tim		Rec	eived I	ау:			······	<u></u>		Da				Tim			- 8		<u>"'''</u>
Relinquishe	d by:			9/30 Date:	105 15 Time	<u>්ට</u>	P==	سسنگوس آرانه جودون	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ار <u>چن د رغ</u>	<u>.</u>	<u> </u>	ر <del>اریک</del>	<u> </u>	<del>-C</del>		<u> </u>	2/0		/	57	G.	Femp @ receipt: <del>4.6</del>	∘c
and the same	and the	20		9/20/0	71 /62		Rece	eived l	οy: . <u>/</u> //	) '	y . w -		•			te://		/	Tim	e:				
Relinquishe	d by:	<del>~~~~~~~~~~~~~~~~</del>	1	Date:	7) / / / / Time			eived b				37	·	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7/3/ Da		<u>.                                    </u>	- >	Tim	e. <u>//; 3</u> e:	19	]	Preservation / pH checked? 👸	/ N.
		<u>-</u> -							-,.			FF.	1		υď	ı <del>c</del> ,			11111	♥.		Ş	By: <u>                                     </u>	
OT/ 14	/	_																					<u>νν ν. 19\ </u> Date: <u>* 1/30  γ</u>	\$222 July 1

# Severn Trent Laboratories, Inc. **Chain of Custody Form**



24168

●53 Southampton Road Westfield, MA 01085 (P) 413-572-4000 (F) 413-572-3707

●149 Rangeway Road N. Billerica, MA 01862 (P) 978-667-1400 (F) 978-667-7871

Chem. Harrywell Tat'l	Inc	Proje	ct#: <u>36</u> 5	ر سار رست	74B		Job# ,	5~ Λ	A.K.		Quote#	STE Westileid	STL Billerica / Service	Cente	
Address:		Project Mana	<u> </u>	<u> </u>	Sha	40d a	710	-N 200			1.04				
				·			sig R		ce use	Comments					
Dhamai		_	Work ID: Besty Products								method	(Special Instructions)			
Phone: Fax:		Cont	Contact: M. Ap. 12 Jun								ection.				
Requested Turnaround Time (PLEASE SI	PECIFY)	Regulatory Class	al Report Forma	at	For exan	iple: es for di	riblenasi	L		Please print legibility. If the analytical					
STANDARD X RUSH	NPDES	Drinking Water		500-series for drinking water 600-series for waste water, NPDES 6000-series for groundwater, soil, waste 8000-series for groundwater, soil, waste Use complete septen to further define.					requests are not cle	arly defined on the					
(Lab Appro	Other	ICP GW1/S1	inking Water QA/QC Report CP GW1/S1 —— DQE (MCP) Rpt					gropndw gropndw	ater, soi	i, waste	chain-of-custody, the turnaround time will begin after all questions have been				
Sample Type Codes		Otrier		DEF	P Form(s)	\	Jse com	pents s	eption	further	define.	satisfactorily answe	uestions have been		
WW-Wastewater DW-Drinking water SW-LW-Lab water GW-Groundwater A		1		Preserva	tive 👸 🔾	12	ج و ا		7 7	ŠĪ T			<del></del>		
CO-1110 "	.ir Other		ල			\ <b>⊗</b> /:			p   F	-	ပြု	Tio Blank	Dine lands		
/	Julei	Date	Comp. # Containers Plastic(P) or Glass(	00	12 12 12 12 12 12 12 12 12 12 12 12 12 1	/625/		7 ETPH	Mercury-245-1-1-74 General Chemistry			Tip Blank taker from	1110/01/10		
		Time	Comp. # Containers Plastic(P) or Gle	HNO3 to pH <br H2SO4 to pH < HCl to pH <2	NaOH to pH >12 Na2S203 None / 4° C Volatiles 524 /62/	525 /		6/3		Bactériological	_   t	taker hon	Mark		
Sample ID	e e .	Collected	aine	일의공	0 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	25			# 4	<u>8</u>	) as(		7.1600		
	Sample Type Sampler's Initials	4	함티하다	HNO3 to p H2SO4 to HCI to pH	Na2S203 None / 4° C Volatiles 524 Volatiles 601	Semivoa	4	1/2	Mereury	Bactériolo Toxistr	<b>\$</b>  \overline{\o				
	S T Sa			[후 [후 [후]	등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등			Metals	\$ \$	act act	₹   %   ~   %				
BO93005- Effluent	GW MAA	9.30-05					<del>/ " </del>	<u>≤</u>  4	<u>₹ Ф</u>	100 1	<u> </u>	4			
T TOOM T	GOO! MIGHT	1100 /	<del></del>	$\square$			11					]. ,		•,	
		<u>\</u>			XX						1	, .	A s		
		1/2	<del> </del>	┝┼┼┼				44			_ _ _	, į į,			
	<del>- - - </del>	<b>1</b>			X	$\mathbf{X}$	11	] [				ľ			
			,			1	<del>,    </del>	╅	-+-	┼┼	<del>      -</del>	. '			
	<del></del>	<del></del>	<del>                                     </del>		X	_ [&	4	1 1				Ì	1 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
		· · · · · · / /													
		1	<del>├╶├─┤</del>	<del>                                     </del>	╅┼┼┼┼	<del></del>	N.	44				1	".		
	<del>- - - - - </del>				X	1.					} }	Y .		•	
						+	+	++			╂╼┼╾	<b>!</b> :	1		
	<del>                                     </del>						.	X			1		•		
		———— X		X							1 -		f		
		<del>-     </del>		<del>-                                     </del>	┽╾╁╌╂╌┼			11.	$\Delta$		<del>∐</del> _				
·	VV	X				1			X	*				.	
B093005- Tala Block	TB	9/29/05				٦,	+	┼╌┼	+		╀╌┼╌		4.5	ĺ	
B093005-Trip Blank ampled by (print):	1.77	- 0900 M								.		A Comment		-	
M VV			Signature:	MAA									MADEP Requirement	Yell C	
elinquished by:	Date:	Time:	Received b	-	· ,·· · · · · · · · · · · · · · · · · ·							Cooler? >>> N	Samples Iced? / Y \	,	
MAA	<u>9/3</u> 3 Date:	105 1500	Treceived b	y:	0.	Da	te:	.,	Tim		,		<u></u>		
elinquished by:	Date:	Time:	Received b	V	Taken	<u>- المحرد</u>	te: 77	30/	, , , , , , , , , , , , , , , , , , ,	15	39	Temp @ receipt:	4.6	°C	
elinquished by:	also,	1639		2/1		υa	,		Tim		,				
einquisiled by:	'Date/	Time:	Received by	ý!		Dá	1501	OK :	Tim	-39		Preservation / pH c	hecked? 🔊 / N		
	<del></del>			-	AN - 19	. <i>-</i> 2a			. (111)	Ç. `	·		1		
STL WESTFIELD	•						~					By: Jugan D:	ite; <u>9/20/ xx</u>	***	